

Chapter 130. Texas Essential Knowledge and Skills for Career and Technical Education

Subchapter D. Business Management and Administration

§130.131. Implementation of Texas Essential Knowledge and Skills for Business Management and Administration, Adopted 2015.

- (a) The provisions of this subchapter shall be implemented by school districts beginning with the 2017-2018 school year.
- (b) No later than August 31, 2016, the commissioner of education shall determine whether instructional materials funding has been made available to Texas public schools for materials that cover the essential knowledge and skills for career and technical education as adopted in ~~§§130.132-130.144~~ ~~§§130.132-130.143~~ of this subchapter.
- (c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, ~~§§130.132-130.144~~ ~~§§130.132-130.143~~ of this subchapter shall be implemented beginning with the 2017-2018 school year and apply to the 2017-2018 and subsequent school years.
- (d) If the commissioner does not make the determination that instructional materials funding has been made available under subsection (b) of this section, the commissioner shall determine no later than August 31 of each subsequent school year whether instructional materials funding has been made available. If the commissioner determines that instructional materials funding has been made available, the commissioner shall notify the State Board of Education and school districts that ~~§§130.132-130.144~~ ~~§§130.132-130.143~~ of this subchapter shall be implemented for the following school year.

§130.132. Principles of Business, Marketing, and Finance (One Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 9-11. Students shall be awarded one credit for successful completion of this course.
- (b) Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) In Principles of Business, Marketing, and Finance, students gain knowledge and skills in economies and private enterprise systems, the impact of global business, the marketing of goods and services, advertising, and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems, and settings in business, marketing, and finance.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (c) Knowledge and skills.
 - (1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;

- (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
- (2) The student describes the characteristics of business. The student is expected to:
- (A) explain the principles of supply and demand;
 - (B) differentiate between goods and services;
 - (C) identify the types of business;
 - (D) compare the different forms of ownership;
 - (E) examine the organizational structure and functions of business;
 - (F) interpret the nature of balance sheets and income statements; and
 - (G) identify business cycles.
- (3) The student defines ethics in business. The student is expected to:
- (A) distinguish between ethical and unethical business practices; and
 - (B) contrast ethical, moral, and legal choices that relate to the decision-making process in business situations.
- (4) The student differentiates between the types of economic systems with emphasis on the private enterprise system and the U.S. economy. The student is expected to:
- (A) compare and contrast the types of economic systems, including traditional, centrally planned, market, and mixed economies;
 - (B) summarize the characteristics of the private enterprise system; and
 - (C) identify factors affecting a business' profits, revenues, and expenses.
- (5) The student relates to the impact of international business on the U.S. economy. The student is expected to:
- (A) explain the role of business in a global society;
 - (B) compare domestic and world trade; and
 - (C) explain the impact of imports and exports on the U.S. economy.
- (6) The student identifies the role and impact of government, the legal system, and organized labor in business. The student is expected to:
- (A) differentiate among the roles of government in business;
 - (B) describe types of activities performed by governments in business;
 - (C) ascertain the role of the legal system in business; and
 - (D) explain the role of organized labor in society.
- (7) The student classifies types of businesses that market goods and services. The student is expected to:
- (A) explain the importance of different marketing strategies for goods versus services;

- (B) define business and industry terms such as producers, raw-goods producers, manufacturers, builders, trade industries, retailers, wholesalers, and service businesses;
 - (C) identify types of retailers;
 - (D) explain the role of retailers in a private enterprise system;
 - (E) identify examples of wholesalers; and
 - (F) describe the role of wholesalers in a private enterprise system.
- (8) The student analyzes cost and profit relationships in finance. The student is expected to:
- (A) explain the concept of productivity;
 - (B) analyze the impact of specialization and division of labor on productivity; and
 - (C) explain the concept of organized labor and business.
- (9) The student understands the fundamental principles of money. The student is expected to:
- (A) evaluate forms of financial exchange, including cash, credit, debit, and electronic funds transfer;
 - (B) identify types of currency, including paper money, coins, banknotes, government bonds, and treasury notes;
 - (C) list functions of money such as medium of exchange, unit of measure, and store of value;
 - (D) summarize the purposes and importance of credit; and
 - (E) explain legal responsibilities associated with financial exchanges.
- (10) The student demonstrates an understanding of personal financial management. The student is expected to:
- (A) explain the importance of providing accurate information;
 - (B) calculate gross and net pay;
 - (C) simulate opening and maintaining various types of bank accounts;
 - (D) reconcile bank statements;
 - (E) compare the advantages and disadvantages of different types of banking services;
 - (F) examine investment growth by developing a personal investment plan; and
 - (G) prepare an individual income tax return.
- (11) The student explains the importance of marketing as well as the functions of marketing. The student is expected to:
- (A) define marketing;
 - (B) understand how marketing is related to other functions of business;
 - (C) explain the marketing concept; and
 - (D) describe marketing functions and its related activities.
- (12) The student understands the scope of market identification. The student is expected to:
- (A) explain the concept of market and market identification;
 - (B) identify market segments;
 - (C) explain the difference in market segmentation and mass marketing;
 - (D) define and explain the importance of target markets; and
 - (E) identify a target market for a product or service using market segmentation.

- (13) The student understands the importance of an effective marketing mix. The student is expected to:
 - (A) explain the concept of marketing strategies;
 - (B) define each component of the marketing mix;
 - (C) identify examples of an effective marketing mix;
 - (D) create an effective marketing mix for a product or service; and
 - (E) explain the role of participation as a key element of marketing.
- (14) The student identifies career opportunities within the Business Management and Administration career cluster, the Finance career cluster, and the Marketing career cluster and formulates a career plan. The student is expected to:
 - (A) analyze individual goals and interests;
 - (B) determine individual talents, abilities, and skills; and
 - (C) develop an individual career plan.

§130.133. Touch System Data Entry (One-Half Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 9 and 10. Students shall be awarded one-half credit for successful completion of this course.
- (b) Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) In Touch System Data Entry, students apply technical skills to address business applications of emerging technologies. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students will need to apply touch system data entry for production of business documents.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (c) Knowledge and skills.
 - (1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;
 - (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.

- (2) The student applies the proper keyboarding technique to input data when using the computer. The student is expected to:
- (A) demonstrate correct posture and position while conducting data entry;
 - (B) display proper care and operation of equipment used;
 - (C) apply the correct touch-system techniques for operating alphabetic keys;
 - (D) demonstrate the correct touch-system techniques for operating numeric and symbol keys;
 - (E) use the correct touch-system techniques for operating the ten-key numeric pad; and
 - (F) correctly use the command and function keys.
- (3) The student applies correct techniques for the touch-system of operating the keyboard to develop speed and accuracy. The student is expected to:
- (A) demonstrate improvement in speed and accuracy;
 - (B) develop the ability to proofread and edit writing for proper voice, tense, and syntax, assuring that it conforms to standard English, when appropriate;
 - (C) use the backspace key to correct errors;
 - (D) compose a variety of business documents under timed situations;
 - (E) apply speed and accuracy in production of documents; and
 - (F) demonstrate mastery of basic grammar, including using punctuation marks, capitalization, and sentence structure correctly.
- (4) The student formats and prints documents such as personal and business letters, short reports, outlines, and compositions. The student is expected to:
- (A) demonstrate the ability to work from printed, rough-draft, statistical, handwritten, and unarranged material;
 - (B) demonstrate the ability to compose at the keyboard;
 - (C) demonstrate the ability to proofread;
 - (D) identify the parts of a personal and business letter;
 - (E) format personal and business letters and envelopes;
 - (F) format all pages of a report, including a title page, reference page, and bibliography;
 - (G) format an outline; and
 - (H) demonstrate mastery of basic grammar, including using punctuation marks, numbers and symbols, and capitalization correctly.
- (5) The student prepares business documents using effective communication. The student is expected to:
- (A) interpret and follow directions to produce documents;
 - (B) demonstrate proficiency in business English, spelling, and proofreading;
 - (C) identify and apply correct format for business correspondence and documents; and
 - (D) demonstrate concepts and processes to employ the appropriate steps in document production.
- (6) The student improves level of proficiency in producing complex business documents. The student is expected to:
- (A) refine work habits; and

- (B) improve techniques, speed, and accuracy in document production.
- (7) The student solves problems using document processing skills. The student is expected to:
 - (A) identify criteria for selection and evaluation of word-processing software;
 - (B) analyze proper placement, format, and priority of completion;
 - (C) produce business correspondence such as letters, memos, emails, press releases, announcements, tables, reports, legal documents, and business forms; and
 - (D) prepare and distribute personalized correspondence using electronic mail.
- (8) The student develops the technology and social skills necessary to work in an office environment. The student is expected to:
 - (A) create and present a visual and oral report using text and graphics;
 - (B) relate the social ramifications of computer applications to privacy, values, and ethics;
 - (C) enhance overall office productivity by responsible use of computer systems;
 - (D) develop human-relation skills for working in a team environment; and
 - (E) participate in student leadership activities.

§130.134. Business Law (One Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 11 and 12. Students shall be awarded one credit for successful completion of this course.
- (b) Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) Business Law is designed for students to analyze various aspects of the legal environment, including ethics, the judicial system, contracts, personal property, sales, negotiable instruments, agency and employment, business organization, risk management, and real property.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (c) Knowledge and skills.
 - (1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;
 - (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) show integrity by choosing the ethical course of action and comply with all applicable rules, laws, and regulations; and

- (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
- (2) The student defines ethics in business. The student is expected to:
- (A) distinguish between ethical and unethical business practices; and
- (B) contrast ethical, moral, and legal choices that relate to the decision-making process in business situations.
- (3) The student identifies the different types of law, courts, and regulations in the judicial system. The student is expected to:
- (A) identify the concepts of civil and criminal law;
- (B) explain the different types of courts and traditional court procedures;
- (C) differentiate between business torts and crimes; and
- (D) comprehend the rationale for governmental [government] regulations of business activities.
- (4) The student identifies the principles of contracts in business. The student is expected to:
- (A) explain the classes of contracts;
- (B) cite methods of offer and acceptance;
- (C) explain the different capacities to contract;
- (D) examine the concepts of consideration;
- (E) describe defective agreements;
- (F) describe illegal agreements; and
- (G) research contemporary cases dealing with contract law using appropriate online technology.
- (5) The student explains personal property. The student is expected to:
- (A) contrast real property with personal property;
- (B) analyze the nature of personal property;
- (C) recognize the different types of bailments and obligations and rights under each type; and
- (D) research cases dealing with personal property using appropriate online technology.
- (6) The student identifies the concept of sales in the context of business law. The student is expected to:
- (A) identify the nature of goods and services;
- (B) explain the formalities of sale;
- (C) characterize the transfer of title and risks in sales contracts;
- (D) identify and explain the types and categories of warranties, product liability, and consumer protection; and
- (E) research cases dealing with contract sales using appropriate online technology.
- (7) The student researches negotiable instruments. The student is expected to:
- (A) explain the nature of negotiable instruments;
- (B) identify the essentials of negotiability;
- (C) explain promissory notes and drafts;

- (D) distinguish between negotiation and discharge;
 - (E) assess the liabilities of the holders in due course;
 - (F) identify the defenses in dealing with negotiable instruments; and
 - (G) research cases dealing with negotiable instruments using appropriate online technology.
- (8) The student analyzes the concepts of agency and employment. The student is expected to:
 - (A) summarize the nature and creation of an agency;
 - (B) explain the operation and termination of an agency;
 - (C) recognize the nature of employer and employee relations;
 - (D) explain employee rights;
 - (E) identify the tenets of labor legislation; and
 - (F) research cases dealing with employment law using appropriate online technology.
- (9) The student identifies the different types of business organization. The student is expected to:
 - (A) explain a sole proprietorship;
 - (B) explain the creation and operation of a partnership;
 - (C) discuss the nature and creation of a corporation;
 - (D) depict the ownership of a corporation; and
 - (E) describe the management and dissolution of a corporation.
- (10) The student explains risk-management instruments. The student is expected to:
 - (A) identify the principles of insurance;
 - (B) review the types of insurance;
 - (C) recognize security devices such as fidelity bonds and securities;
 - (D) discuss the appropriateness and categories of bankruptcy; and
 - (E) research contemporary cases dealing with risk-bearing devices using appropriate online technology.
- (11) The student describes the legal contexts of real property. The student is expected to:
 - (A) explain the nature of real property;
 - (B) establish the proper methods for the transfer of real property;
 - (C) describe the different types of real estate mortgages;
 - (D) review contemporary landlord-tenant law;
 - (E) explain wills, inheritances, and trusts; and
 - (F) research cases dealing with real estate law using appropriate online technology.
- (12) The student knows how to use self-development techniques and interpersonal skills to accomplish legal tasks and solve cases. The student is expected to:
 - (A) identify and practice effective interpersonal skills involving situations with coworkers, supervisors, and clients;
 - (B) identify and practice effective [and] team-building skills involving situations with coworkers, supervisors, and clients; and
 - (C) participate in leadership and career development activities.

§130.135. Business English (One Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grade 12. Prerequisite: English III Recommended Prerequisite: Touch Systems Data Entry. ~~Students shall be awarded one credit for successful completion of this course.~~ This course satisfies the high school advanced English graduation requirement. Students shall be awarded one credit for successful completion of this course.
- (b) Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) In Business English, students enhance communication and research skills by applying them to the business environment, in addition to exchanging information and producing properly formatted business documents using emerging technology.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (c) Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;
 - (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) show integrity by choosing the ethical course of action and comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
 - (2) The student prepares for effective communication skills. The student is expected to:
 - (A) organize ideas logically and sequentially;
 - (B) locate and interpret written information;
 - (C) distinguish communicated fact from opinion by identifying key words;
 - (D) interpret visual materials such as charts, graphs, pictures, and maps and translate the information into textual form;
 - (E) employ precise language to communicate ideas clearly and concisely; and
 - (F) organize ideas in writing in a coherent, logical progression.
 - (3) The student employs appropriate research techniques to produce effective business communication. The student is expected to:
 - (A) incorporate information from printed copies and electronic resources and references;

- (B) locate and paraphrase secondary sources;
 - (C) document secondary sources;
 - (D) design, conduct, and analyze the results of a survey;
 - (E) conduct interviews to obtain resource materials; and
 - (F) create a business project incorporating data imported from various sources.
- (4) The student exchanges information via telecommunications such as email, images, social media, and other online information services with appropriate supervision. The student is expected to:
 - (A) evaluate which telecommunications methods are most appropriate to a given situation; and
 - (B) apply appropriate business ethics and correct etiquette when using telecommunications.
- (5) The student illustrates proficiency in interpersonal communication. The student is expected to:
 - (A) develop professional vocabulary skills;
 - (B) execute effective oral presentations;
 - (C) deliver an effective business presentation such as sales, reports, and proposals;
 - (D) apply effective communication techniques when using the telephone and different forms of technology;
 - (E) demonstrate the ability to listen by writing summaries of presentations and oral conversations;
 - (F) display active listening through oral feedback;
 - (G) follow oral and written directions;
 - (H) demonstrate the ability to give oral instructions for completing a simple task; and
 - (I) apply proper business interviewing techniques in various situations such as one-on-one, group, and committee interviews.
- (6) The student develops communication skills necessary to address a changing business environment. The student is expected to:
 - (A) describe the communication process;
 - (B) identify barriers to effective communication;
 - (C) assess the ethical and legal implications of messages;
 - (D) discern appropriate channels for transmitting messages;
 - (E) interpret nonverbal communication in various activities;
 - (F) illustrate the impact of nonverbal communication on the total communication process;
 - (G) identify ways to improve communication in organizations; and
 - (H) discuss potential communication problems in multicultural business environments.
- (7) The student produces business documents using current and emerging technology. The student is expected to:
 - (A) format business documents;
 - (B) demonstrate basic writing skills through assigned tasks;
 - (C) compose positive, negative, and persuasive messages;
 - (D) compose business letters and memos using the appropriate organizational strategies;

- (E) produce a business report containing text and graphics; and
- (F) develop a business newsletter.
- (8) The student documents technical knowledge and skills. The student is expected to:
 - (A) prepare a professional electronic portfolio that includes information such as :
 - (i) attainment of technical skill competencies;
 - (ii) recognitions, awards, and scholarships;
 - (iii) extended learning experiences such as community service and active participation in career and technical student organizations;
 - (iv) sample letter of application;
 - (v) resume;
 - (vi) samples of work; and
 - (vii) teacher recommendations; and
 - (B) present the portfolio to [all] interested stakeholders [such as in a multimedia presentation] .
- (9) The student understands how to collect and use information in procedural texts and documents. The student is expected to:
 - (A) draw conclusions about how the patterns of organization and hierarchic structures support the understandability of text;
 - (B) evaluate the structures of text such as format or headers for their clarity and organizational coherence; and
 - (C) evaluate the structures of text for the effectiveness of their graphic representations.
- (10) The student uses comprehension skills to analyze how words, images, graphics, and sounds work together in various forms to impact meaning. The student applies the knowledge and skills in paragraphs (2)-(9) of this subsection with greater depth in increasingly more complex texts. The student is expected to:
 - (A) evaluate how messages presented in media reflect social and cultural views in ways different from traditional texts;
 - (B) evaluate the interactions of different techniques used in multi-layered media such as layout, pictures, typeface in print media, images, text, or sound in electronic journalism;
 - (C) evaluate how one issue or event is represented across various media to understand the notions of bias, audience, and purpose; and
 - (D) evaluate changes in formality and tone across various media for different audiences and purposes.
- (11) The student uses elements of the writing process (planning, drafting, revising, editing, and publishing) to compose text. The student is expected to:
 - (A) plan a first draft by selecting the correct genre for conveying the intended meaning to multiple audiences; determining appropriate topics through a range of strategies such as discussion, background reading, personal interests, or interviews; and developing a thesis or controlling idea;
 - (B) structure ideas in persuasive ways such as using outlines, note taking, graphic organizers, or lists to develop drafts in timed and open-ended situations;
 - (C) revise drafts to clarify meaning, consistency of tone, and logical organization;
 - (D) edit drafts for grammar, mechanics, and spelling; and

- (E) revise a final draft in response to feedback from peers and teacher and publish written work for appropriate audiences.
- (12) The student writes expository and procedural or work-related texts to communicate ideas and information to specific audiences for specific purposes. The student is expected to:
- (A) write an analytical essay of sufficient length that includes effective introductory, concluding, and supporting paragraphs that incorporate relevant perspectives and evidence;
- (B) write procedural and work-related documents such as resumes, proposals, college applications, or operation manuals that include a clearly stated purpose combined with a well-supported viewpoint on the topic; appropriate formatting structures such as headings, graphics, or white space; and accurate technical information; and
- (C) produce a multimedia presentation such as a documentary, class newspaper, docudrama, infomercial, or visual or textual parody that includes graphics, images, and sound and appeals to a specific audience.
- (13) The student understands the function of and uses the conventions of academic language when speaking and writing. The student continues to apply the knowledge and skills in paragraphs (2)-(12) with greater complexity. The student is expected to:
- (A) understand and use adjectival, noun, or adverbial clauses and phrases; and
- (B) use a variety of correctly structured sentences such as compound, complex, or compound-complex.
- (14) The student writes legibly and uses appropriate capitalization and punctuation conventions in compositions. The student is expected to correctly and consistently use conventions of punctuation and capitalization.
- (15) The student spells correctly. The student is expected to spell correctly, including using various resources to determine and check correct spellings.
- (16) The student organizes and presents ideas and information according to the purpose of the research and the audience. The student is expected to:
- (A) synthesize research into an extended written or oral presentation;
- (B) provide an analysis that supports and develops personal opinions, as opposed to simply restating existing information;
- (C) use a variety of formats and rhetorical strategies to argue for the thesis;
- (D) develop an argument that incorporates the complexities of and discrepancies in information from multiple sources and perspectives while anticipating and refuting counter-arguments;
- (E) document sources and format written materials using a style manual such as *Modern Language Association*; and
- (F) produce a document of sufficient length and complexity to address the topic.
- (17) The student makes oral presentations. The student is expected to use proper conventions of language and presentation.
- (18) The student works productively with others in teams. The student is expected to offer ideas or judgments that are purposeful in moving the team toward goals, ask relevant and insightful questions, tolerate a range of positions and ambiguity in decision making, and evaluate the work of the group based on agreed-upon criteria.

§130.136. Business Information Management I (One Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 9-12. Recommended prerequisite: Touch Systems Data Entry. ~~Recommended corequisite: Business Lab.~~ ~~[May be paired with Business Lab as a corequisite.]~~ Students shall be awarded one credit for successful completion of this course.
- (b) Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (c) Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills as required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;
 - (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
 - (2) The student coordinates information management and business management to aid in business planning. The student is expected to:
 - (A) explain the strategic role of information systems and information communication technology within an organization;
 - (B) determine risks and rewards of developing a strategic role for information systems and information communication technology; and
 - (C) integrate information systems planning with business planning.
 - (3) The student enhances usability of systems operations to support business strategies and operations. The student is expected to:
 - (A) identify the management information requirements and business needs of an organization; and

- (B) explain issues involved in designing and developing systems for different environments.
- (4) The student analyzes available software packages for use in business settings. The student is expected to:
 - (A) determine equipment and supplies needed;
 - (B) establish equipment and supplies maintenance systems;
 - (C) schedule equipment maintenance;
 - (D) use equipment and supplies maintenance procedures; and
 - (E) use critical-thinking skills to troubleshoot equipment and software issues.
- (5) The student uses the computer's operating system to execute work responsibilities. The student is expected to:
 - (A) move files in the computer operating system;
 - (B) create directories; and
 - (C) save files in various formats such as plain text, PDF, rich text format, and older versions of word-processing software.
- (6) The student applies word-processing technology. The student is expected to:
 - (A) identify customary styles of business documents;
 - (B) improve touch-system skills using the keyboard and keypad to input data;
 - (C) use hardware and software needed to produce documents to address different computer applications;
 - (D) demonstrate writing techniques generating ideas and gathering information relevant to the topic and purpose while maintaining accurate records of outside sources;
 - (E) produce business documents, including business letters, resumes, research papers, and newsletters;
 - (F) edit a variety of written documents;
 - (G) insert and edit objects such as tables, graphics, hyperlinks, headers, and footers into a document;
 - (H) prepare and distribute personalized correspondence using mail merge; and
 - (I) use online word-processing technologies to create, edit, and share documents.
- (7) The student identifies database software to create databases that facilitate business decision making. The student is expected to:
 - (A) explain the principles of data analysis;
 - (B) explain the nature of tools that can be used to access information in the database system;
 - (C) choose appropriate software;
 - (D) define fields and type of data;
 - (E) create database structure;
 - (F) define relationships of tables;
 - (G) analyze company data requirements; and
 - (H) design a database to meet business requirements.
- (8) The student applies data entry techniques to enter information in databases. The student is expected to:

- (A) access information in the database system;
 - (B) build data in a data warehouse;
 - (C) enter and edit data into database tables and database forms for easy data entry; and
 - (D) import and export databases.
- (9) The student uses commands to retrieve data and create reports from databases. The student is expected to:
 - (A) retrieve data from tables and queries;
 - (B) formulate queries; and
 - (C) create and print reports.
- (10) The student applies data mining methods to acquire pertinent information for business decision making. The student is expected to:
 - (A) discuss the nature of data mining;
 - (B) describe data mining tools;
 - (C) demonstrate basic data mining techniques; and
 - (D) interpret data mining findings.
- (11) The student applies spreadsheet technology. The student is expected to:
 - (A) perform mathematical processes, including percentages and decimals, order of operations principle, estimation, and prediction of patterns of data;
 - (B) formulate and produce solutions to a variety of business problems such as budgets, payroll, inventory, invoices, balance sheets, profit-loss statements, and conversion of foreign currencies;
 - (C) create charts, graphs, and infographics using spreadsheet data; and
 - (D) use online spreadsheet technologies to create, edit, and share documents.
- (12) The student applies presentation management technology. The student is expected to:
 - (A) identify the guidelines for using graphics, fonts, and special effects in presentations;
 - (B) analyze the effectiveness of multimedia presentations;
 - (C) determine the appropriate technology to create and deliver an effective presentation;
 - (D) save documents in various formats such as template, video, and PDF to share or transport electronically;
 - (E) deliver an effective presentation; and
 - (F) use online presentation management technologies to create, edit, transport, and share documents.
- (13) The student applies desktop publishing technology. The student is expected to:
 - (A) identify technologies available for desktop publishing;
 - (B) identify customary standards and styles of desktop publishing; and
 - (C) create desktop publications importing text and graphics.
- (14) The student uses a variety of software applications. The student is expected to integrate multiple learned software applications to efficiently accomplish workplace tasks.

§130.137. Business Information Management II (One Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Business Information Management I. Recommended Prerequisite: Touch System Data Entry. ~~Recommended corequisite: Business Lab.~~ ~~May be paired with Business Lab as a corequisite if additional skill development is required for industry certification.~~ Students shall be awarded one credit for successful completion of this course.
- (b) Introduction.
- (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) In Business Information Management II, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies, create complex word-processing documents, develop sophisticated spreadsheets using charts and graphs, and make an electronic presentation using appropriate multimedia software.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those that contain the phrase "such as" are intended as possible illustrative samples.
- (c) Knowledge and skills.
- (1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;
 - (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) show integrity by choosing the ethical course of action and comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
 - (2) The student demonstrates project management processes to conduct a business project using emerging technologies. The student is expected to:
 - (A) initiate ~~implement~~ a project;
 - (B) plan ~~manage~~ a project ~~team~~ ;
 - (C) execute ~~monitor~~ a ~~business~~ project;
 - (D) monitor and control a project ~~minimize a business project's errors~~ ; and
 - (E) close ~~conclude~~ a business project.

- (3) The student demonstrates the use of the concepts, strategies, and systems for obtaining and conveying ideas and information to enhance communication in a diverse workplace. The student is expected to:
- (A) employ verbal and active listening skills when obtaining and conveying information;
 - (B) record information needed to present a report on a given topic and use items such as tables of contents, indexes, tabs, footnotes, endnotes, captions, and/or building blocks;
 - (C) write business correspondence using advanced word processing features such as templates and forms; mail merge, including letters, labels, and envelopes; and document protection and security that convey information effectively using correct grammar, spelling, punctuation, and capitalization;
 - (D) use online word processing technologies to create, edit, and share documents;
 - (E) communicate with relevant parties such as coworkers and customers by interpreting verbal and nonverbal behaviors;
 - (F) apply strategies for communicating about issues in dealing with a diverse workforce such as sexual harassment and cultural differences; and
 - (G) demonstrate the ability to communicate and resolve conflicts within a diverse workforce.
- (4) The student creates, evaluates, and uses information resources to accomplish specific occupational tasks. The student is expected to:
- (A) create and interpret items such as tables, charts, infographics, and figures to accomplish specific occupational tasks;
 - (B) use resources such as informational texts, Internet websites, and technical materials to review and apply information sources for occupational tasks;
 - (C) evaluate the reliability of information from sources such as informational texts, Internet websites, and technical materials and resources; and
 - (D) reference sources of information.
- (5) The student develops and delivers formal and informal presentations using appropriate media to engage and inform audiences. The student is expected to:
- (A) prepare oral presentations to provide information for specific purposes and audiences;
 - (B) identify support materials that will enhance an oral presentation;
 - (C) prepare support materials that will enhance an oral presentation;
 - (D) deliver an oral presentation that sustains listeners' attention;
 - (E) align presentation strategies to the intended audience;
 - (F) implement multimedia strategies for presentations; and
 - (G) use online presentation management technologies to create, edit, transport, and share documents.
- (6) The student demonstrates public relations skills to increase internal and external customer satisfaction. The student is expected to communicate effectively when developing positive customer relationships.
- (7) The student designs solutions to mathematical business problems using advanced spreadsheet technologies. The student is expected to:
- (A) recognize and apply spreadsheet items such as lookup tables, what-if and built-in functions, macros, and advanced charts, graphs, and functions; and

- (B) create and interpret financial statements such as comparisons and projections, predictions and forecasts, trend analyses, and charts and graphs.
- (8) The student follows procedures of advanced data management. The student is expected to:
 - (A) design a database to solve business problems; and
 - (B) use advanced functions of database management such as updating queries, creating formulas, using built-in formulas, and creating custom format reports.
- (9) The student documents technical knowledge and skills. The student is expected to:
 - (A) prepare a professional electronic portfolio that includes ~~information such as~~ :
 - (i) attainment of technical skill competencies;
 - (ii) licensures or certifications;
 - (iii) recognitions, awards, and scholarships;
 - (iv) extended learning experiences such as community service and active participation in career and technical student organizations and professional organizations;
 - (v) sample letter of application;
 - (vi) abstract of key points of accomplishments;
 - (vii) resume;
 - (viii) samples of work; and
 - (ix) evaluation from a teacher; and
 - (B) present the portfolio to ~~[all]~~ interested stakeholders ~~[such as in a multimedia presentation]~~ .

§130.138. Business Lab (One Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 9-12 as a ~~[and is the recommended]~~ corequisite course ~~[as an enhancement opportunity]~~ for students participating in a coherent sequence of career and technical education courses in the Business Management and Administration Career Cluster. ~~This course provides an enhancement opportunity for students to develop the [as-needed-to provide]~~ additional ~~skills necessary~~ ~~[skill development]~~ to pursue industry certification. ~~Corequisite: any course in the Business Management and Administration Career Cluster. Recommended corequisite: Business Information Management I or Business Information Management II.~~ This course must be taken concurrently with ~~a corequisite~~ ~~[another relevant]~~ course from the Business Management and Administration Career Cluster and may not be taken as a stand-alone course. ~~Districts are encouraged to offer this lab in a consecutive block with the corequisite course to allow students sufficient time to master the content of both courses. [Recommended corequisite: Business Information Management I or Business Information Management II.]~~ Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
- (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
- (3) Business Lab is designed to provide students an opportunity to further enhance skills of previously studied knowledge and skills and may be used as an extension of Business Information Management I or Business Information Management II; it is a recommended corequisite course, and may not be offered as a stand-alone course. Students implement personal and interpersonal

skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economical, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those that contain the phrase "such as" are intended as possible illustrative samples.

(c) Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;
 - (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) comply with all applicable rules, laws, and regulations;
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results; and
 - (G) pursue appropriate licensing, certification, and/or credentialing requirements relevant to the business field.
- (2) The student develops an elevated aptitude for the essential skills listed for the recommended corequisite course(s). The student is expected to:
 - (A) demonstrate deeper understanding of related course requirements;
 - (B) develop mastery of hands-on skills at an industry accepted standard; and
 - (C) exhibit progress toward achieving industry recognized documentation of specific expertise in a business field or skill.

§130.139. Business Management (One Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 10-12. Students shall be awarded one credit for successful completion of this course.

(b) Introduction.

- (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
- (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing and evaluating business functions essential to efficient and productive business operations.
- (3) Business Management is designed to familiarize students with the concepts related to business management as well as the functions of management, including planning, organizing, staffing,

leading, and controlling. Students will also demonstrate interpersonal and project-management skills.

(4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.

(5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

(1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:

(A) communicate effectively with others using oral and written skills;

(B) demonstrate collaboration skills through teamwork;

(C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;

(D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;

(E) comply with all applicable rules, laws, and regulations; and

(F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.

(2) The student demonstrates an understanding of the management concept. The student is expected to:

(A) define the term management;

(B) explain management functions, including planning, organizing, staffing, leading, and controlling;

(C) define the management pyramid;

(D) define the role of management;

(E) explain the history and evolution of management;

(F) identify the external and internal environmental factors that influence management;

(G) define ethical workplace behavior;

(H) summarize how to make ethical decisions;

(I) define social responsibility;

(J) explain how socially responsible management policies are initiated and implemented; and

(K) research contemporary cases dealing with ethics and social responsibility using appropriate online technology.

(3) The student recognizes the importance of planning in an organization. The student is expected to:

(A) define the term planning;

(B) explain the necessity of proper planning;

(C) define types of planning such as marketing, financial, and organizational;

(D) identify steps of the management decision-making process, including:

(i) identifying the problem or opportunity;

(ii) gathering relevant information or data;

- (iii) determining alternative courses of action;
- (iv) evaluating each alternative;
- (v) computing an optimal decision;
- (vi) implementing the chosen course of action; and
- (vii) evaluating the decision feedback and determining if any changes are necessary;
- (E) determine competitive advantage;
- (F) establish organizational strategy;
- (G) determine innovative strategies;
- (H) identify the need for change;
- (I) define global management; and
- (J) explain how the organization will function in a global environment.
- (4) The student recognizes the importance of organizations. The student is expected to:
 - (A) explain how to design an adaptive organization;
 - (B) define the concepts, methods, and types of departmentalization;
 - (C) define the chain of command;
 - (D) explain line authority;
 - (E) define staff authority;
 - (F) explain the advantages and disadvantages of different types of organizations, including line, line and staff, and matrix;
 - (G) define delegation in a management context;
 - (H) compare and contrast centralized and decentralized organizations;
 - (I) identify the concept of teams and teamwork; and
 - (J) define span of control or span of management.
- (5) The student explains the role of staffing within an organization. The student is expected to:
 - (A) describe ethics in human resource issues;
 - (B) explain or define the major federal employment laws;
 - (C) define adverse impact and employment discrimination;
 - (D) identify sexual harassment in the workplace;
 - (E) explain the methods of recruiting potential employees;
 - (F) define the selection process for new employees;
 - (G) explain the types of training needed for newly hired employees;
 - (H) define professional development in terms of current employees;
 - (I) explain employee compensation in a competitive environment;
 - (J) define the potential need for downsizing;
 - (K) rationalize the costs of employee turnover and what can be done to reduce turnover rate;
 - (L) explain the need and benefits of a diverse workforce; and
 - (M) research contemporary cases addressing recruitment, downsizing, and diversity using appropriate online resources.

- (6) The student demonstrates the qualities of leadership. The student is expected to:
- (A) define motivation;
 - (B) distinguish between extrinsic and intrinsic rewards;
 - (C) explain how to address real or perceived inequities in the workplace;
 - (D) define the Expectancy Theory;
 - (E) explain how rewards and goals affect motivation;
 - (F) compare a leader to a manager;
 - (G) explain the roles of a leader;
 - (H) explain the traits of an effective leader;
 - (I) define the different styles of leadership, including autocratic, democratic, and free rein;
 - (J) explain when each style of leadership is appropriate;
 - (K) define the management communication process;
 - (L) explain the concept of employee perception;
 - (M) analyze the communication process;
 - (N) compare and contrast formal and informal communication; and
 - (O) explain how to improve communication within an organization.
- (7) The student understands the necessity of the control process. The student is expected to:
- (A) examine the control process;
 - (B) illustrate the five primary control methods;
 - (C) explain the importance of quality control;
 - (D) define the strategic importance of management information;
 - (E) develop the importance of gathering and sharing information;
 - (F) explain the importance of managing for productivity and growth;
 - (G) define the quality-related characteristics for products;
 - (H) explain International Standards Organization (ISO) standards, including ISO 9000 and ISO 14000;
 - (I) define the quality-related characteristics for services;
 - (J) explain the Baldrige National Quality Award;
 - (K) explain the Deming Award;
 - (L) research and critique recent winners of the Baldrige awards using appropriate online technology;
 - (M) research and critique recent winners of the Deming award using appropriate online technology;
 - (N) define Total Quality Management;
 - (O) explain service operations;
 - (P) develop a service quality standards instrument such as a customer satisfaction survey or SERVQUAL survey;
 - (Q) analyze manufacturing operations;

- (R) define inventory in the management context; and
- (S) explain the fiscal importance of controlling inventory.
- (8) The student knows self-development techniques and interpersonal skills to accomplish management objectives. The student is expected to:
 - (A) recognize personal biases and stereotypes;
 - (B) identify and practice effective interpersonal skills involving situations with coworkers, supervisors, and subordinates;
 - (C) identify and practice effective team-building skills involving situations with coworkers, supervisors, and subordinates;
 - (D) participate in leadership activities;
 - (E) participate in career development activities;
 - (F) assess personal strengths and weaknesses; and
 - (G) develop personal traits and behaviors to foster career advancement.
- (9) The student demonstrates project-management skills to improve workflow and minimize costs. The student is expected to:
 - (A) initiate a project, which includes identifying [identify] resources needed for a project;
 - (B) develop a project plan; [and]
 - (C) execute a project; [apply project management tools to monitor progress.];
 - (D) monitor and control a project; and
 - (E) close a project.

§130.140. Global Business (One-Half Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 10-12. Students shall be awarded one-half credit for successful completion of this course.
- (b) Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) Global Business is designed for students to analyze global trade theories, international monetary systems, trade policies, politics, and laws relating to global business as well as cultural issues, logistics, and international human resource management.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (c) Knowledge and skills.
 - (1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;

- (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
- (2) The student analyzes the theories of global trade and investments. The student is expected to:
 - (A) define global business;
 - (B) explain the advantages of specialization;
 - (C) identify the concept of comparative advantage; and
 - (D) distinguish between portfolio investment and direct investment.
- (3) The student analyzes the role of the international monetary system in the economy. The student is expected to:
 - (A) describe the role of the International Monetary Fund;
 - (B) argue for and against floating exchange rates;
 - (C) argue for and against fixed exchange rates;
 - (D) explain the impact of the common European currency;
 - (E) calculate foreign exchange rates; and
 - (F) research cases dealing with global exchange using appropriate online technology.
- (4) The student identifies the importance of international financial markets. The student is expected to:
 - (A) explain how a foreign exchange market functions;
 - (B) identify the economic factors that influence exchange rates and explain how these factors work; and
 - (C) differentiate between alternative strategies of global banking.
- (5) The student examines various levels of economic integration among foreign countries. The student is expected to:
 - (A) identify the different levels of economic integration;
 - (B) explain the various arguments surrounding economic integration; and
 - (C) describe the organization of the European community.
- (6) The student identifies the importance of different trade and trade investment policies. The student is expected to:
 - (A) understand the role of foreign aid in global trade and investment;
 - (B) explain the goals of the General Agreement on Tariffs and Trade and the North American Free Trade Agreement;
 - (C) identify the major ways in which imports are being restricted and describe reasons for controlling exports; and
 - (D) research cases and issues on global trade using appropriate online technology.

- (7) The student analyzes the implications of politics and laws that control and regulate global business. The student is expected to:
- (A) describe the reasoning behind the regulation of global business behavior;
 - (B) analyze the Foreign Corrupt Practices Act; and
 - (C) discuss the role of international law in the conduct of global business.
- (8) The student researches the business elements of cultural challenges and diversity. The student is expected to:
- (A) explain the role of culture in global business;
 - (B) identify various elements of culture; and
 - (C) suggest ways for managers to understand and deal with cultural diversity.
- (9) The student demonstrates the process in implementing a global operation. The student is expected to:
- (A) describe the rise of global linkages in global business;
 - (B) describe the position of the United States in global trade;
 - (C) list advantages and problem areas for U.S. firms wanting to enter global business;
 - (D) research current cases on imports, exports, and balance of trade using appropriate online technology;
 - (E) relate effects of copyrights and trademarks and intellectual property rights on global business;
 - (F) identify advertising media used in foreign markets such as newspaper, radio, television, Internet, and magazine;
 - (G) define fair trade; and
 - (H) describe benefits of fair trade domestically and internationally.
- (10) The student analyzes the cost effect when using global logistics for a mode of transportation. The student is expected to:
- (A) define global logistics;
 - (B) distinguish between materials management and physical distribution;
 - (C) list the factors that influence the selection of particular transportation modes;
 - (D) describe the usefulness of free trade zones;
 - (E) research free trade zones locally and statewide using appropriate online technology; and
 - (F) relate the effects of geography, time zones, work days, resources, and natural harbors on global business.
- (11) The student identifies different strategies for exporting in the global market. The student is expected to:
- (A) discuss the procedure by which a foreign target market is selected;
 - (B) determine the pricing strategy for export items;
 - (C) identify various data-based analytical techniques available for estimating market potential; and
 - (D) evaluate the reasons behind the need to standardize or to adapt the marketing mix.
- (12) The student identifies the functional changes in process with global human resource management. The student is expected to:

- (A) explain the objectives of human resource management in a global firm;
- (B) describe how the human resources function changes as a firm goes global;
- (C) identify sources of recruitment for staffing positions abroad; and
- (D) describe differences and similarities of training employees in different countries.
- (13) The student analyzes employability skills to obtain successful employment with a company. The student is expected to:
 - (A) assess personal global marketability;
 - (B) identify appropriate employment opportunities abroad;
 - (C) evaluate global employment options such as salaries, benefits, and prerequisites; and
 - (D) generate an orientation manual for people preparing to live and work in a foreign country.
- (14) The student knows how to use self-development techniques and interpersonal skills to accomplish human resources objectives. The student is expected to:
 - (A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, supervisors, and subordinates; and
 - (B) participate in leadership and career development activities.

§130.141. Virtual Business (One-Half Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Touch System Data Entry. Students shall be awarded one-half credit for successful completion of this course.
- (b) Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) Virtual Business is designed for students to start a virtual business by creating a web presence, conducting online and off-line marketing, examining contracts appropriate for an online business, and demonstrating project-management skills. Students will also demonstrate bookkeeping skills for a virtual business, maintain business records, and understand legal issues associated with a virtual business.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (c) Knowledge and skills.
 - (1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;
 - (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;

- (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
- (2) The student analyzes an overview of starting and growing a virtual business office. The student is expected to:
 - (A) identify the nature, history, and duties of a virtual business office;
 - (B) list benefits afforded to virtual business clients;
 - (C) assess personality characteristics to determine suitability for being a self-employed virtual business office employee;
 - (D) inventory skills, interests, strengths, and weaknesses to determine appropriate services to offer;
 - (E) prepare a business plan, including the following sections: executive summary, mission statement, long- and short-term goals, marketing plan, financial plan, and organizational plan; and
 - (F) examine global business considerations.
- (3) The student demonstrates online and off-line marketing, including establishing a web presence. The student is expected to:
 - (A) create and design a website for a virtual business office;
 - (B) describe details of setting up a virtual business office;
 - (C) determine appropriate marketing of a virtual business office;
 - (D) describe steps to successfully market a virtual business office; and
 - (E) participate in leadership and career development activities.
- (4) The student develops contracts appropriate for virtual business office services provided. The student is expected to:
 - (A) research details of setting up a virtual business office;
 - (B) determine particulars of communicating with clients locally and remotely; and
 - (C) set appropriate fees for virtual business office services provided.
- (5) The student establishes pricing, billing, and collections procedures. The student is expected to:
 - (A) research pricing and billing practices of a virtual business office;
 - (B) research appropriate recordkeeping and tax issues;
 - (C) apply fundamental bookkeeping skills for a virtual business office;
 - (D) define appropriate bookkeeping terminology such as accounts payable, accounts receivable, income, expense, asset, liability, profit, balance sheet, and income statement; and
 - (E) prepare appropriate bookkeeping statements, including basic balance sheet and income statement.
- (6) The student describes legal and tax issues related to running a virtual business office. The student is expected to:
 - (A) determine local licensing requirements required for a virtual business office;

- (B) set up a virtual business office;
- (C) research support resources for a virtual business; and
- (D) describe the advantages and disadvantages of the various forms of legal construction of a virtual business office.
- (7) The student maintains business records to facilitate management. The student is expected to:
 - (A) describe the nature of business records needs for a virtual business office; and
 - (B) maintain customer records.
- (8) The student acquires information to analyze business decision making. The student is expected to:
 - (A) monitor internal records for business information; and
 - (B) conduct an environment scan to obtain business information and interpret statistical findings.
- (9) The student demonstrates project-management skills to improve workflow and minimize costs. The student is expected to:
 - (A) initiate a project, which includes identifying ~~[identify]~~ resources needed for a project;
 - (B) develop a project plan ~~[and apply project management tools to monitor project progress]~~ ;
 - (C) execute a project; ~~[evaluate project results; and]~~
 - (D) monitor and control a project, including coordinating ~~[coordinate]~~ work with that of team members ; and [;]
 - (E) close a project.

§130.142. Human Resources Management (One-Half Credit), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 11 and 12. Students shall be awarded one-half credit for successful completion of this course.
- (b) Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) Human Resources Management is designed to familiarize students with the concepts related to human resource management, including legal requirements, recruitment and employee selection methods, and employee development and evaluation. Students will also become familiar with compensation and benefits programs as well as workplace safety, employee-management relations, and global impacts on human resources.
 - (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
 - (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.
- (c) Knowledge and skills.
 - (1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;

- (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
- (2) The student demonstrates an understanding of the traditional human resources functions. The student is expected to:
- (A) define the term human resources;
 - (B) classify the basic human resources functions such as recruiting, selecting, training, developing, and compensating;
 - (C) explain contemporary issues facing human resources managers such as globalization, diversity, new technologies, knowledge workers, and changing trends in the workplace;
 - (D) explain strategies used by contemporary human resources management such as proactive, reactive, downsizing, outsourcing, offshoring, and employee leasing to deal with change;
 - (E) illustrate how the changing demographic trends in the workplace impact diversity in human resources management;
 - (F) categorize the basic responsibilities of a human resources manager, including advice and counsel, service, policy formulation and implementation, and employee advocacy;
 - (G) explain the basic competencies required of an effective human resources manager, including business mastery, human resources mastery, and personal credibility; and
 - (H) define the need and proper steps for strategic planning in human resources such as mission, vision, and values; environmental analysis; internal analysis; strategy formulation; strategy implementation; and evaluation and assessment.
- (3) The student understands and explains how to meet human resources requirements. The student is expected to:
- (A) analyze the major Equal Employment Opportunity laws;
 - (B) discuss federal laws and executive orders that influence human resources management;
 - (C) explain the importance of establishing and implementing strong policies and procedures for dealing with sexual harassment;
 - (D) examine the contemporary social and political issues facing human resources such as sexual orientation, immigration reform and control, and Uniform Guidelines on Employee Selection Procedures;
 - (E) explain the proper procedures to comply with Equal Employment Opportunity Commission rules and regulations;
 - (F) analyze the contemporary concepts of job analysis, employee involvement, and flexible work schedules;
 - (G) create a job description; and
 - (H) research current cases dealing with equal employment using appropriate online technology.
- (4) The student demonstrates the proper methods and sources of recruitment. The student is expected to:

- (A) evaluate the proper methods of recruiting externally;
 - (B) explain the proper methods of recruiting internally;
 - (C) hypothesize how to develop a diverse pool of talent for employment consideration; and
 - (D) explain the application of Equal Employment Opportunity Commission guidelines to the recruitment process.
- (5) The student demonstrates the proper methods of employee selection. The student is expected to:
 - (A) explain how to match an applicant to a job using job analysis and a job description;
 - (B) explain the different types of commonly used pre-employment tests such as polygraph tests, honesty and integrity testing, graphology, physical examination, and drug testing;
 - (C) clarify the relevant factors that should be considered in conducting a criminal background check; and
 - (D) demonstrate the proper methods of conducting pre-employment interviews.
- (6) The student describes the need for training. The student is expected to:
 - (A) analyze the information necessary prior to the implementation of any job-related training, including task analysis and person analysis;
 - (B) design a training program;
 - (C) explain how to implement a training program;
 - (D) evaluate a training program;
 - (E) illustrate the necessity for new employee orientation and the topics that should be covered;
 - (F) explain the concept of on-the-job training and other forms of skills training; and
 - (G) understand the need for training newly hired employees in proper Equal Employment Opportunity Commission rules and procedures, including training on sexual harassment.
- (7) The student describes the need to develop and evaluate employees. The student is expected to:
 - (A) explain why employees often need additional training such as learning new skills and technologies and complying with new laws and regulations;
 - (B) construct an employee appraisal program that complies with all applicable laws; and
 - (C) explain who should evaluate employees, including supervisors and managers, peers, customers or clients, and subordinates.
- (8) The student describes how to implement a compensation program. The student is expected to:
 - (A) interpret the basis of compensation and how it meets with organizational objectives;
 - (B) explain the factors that influence the pay and benefits system;
 - (C) summarize pay for performance, commission, and piece-rate systems;
 - (D) explain how to perform a wage and salary survey;
 - (E) interpret competence-based pay;
 - (F) understand the major federal regulations that influence employee compensation, including Davis-Bacon Act, Walsh-Healy Act, and Fair Labor Standards Act;
 - (G) identify some of the contemporary issues regarding compensation, including equal pay, wage-rate compression, comparable worth, low salary budgets, and employee stock ownership plans;

- (H) explain pay for performance incentives such as bonuses, merit pay, profit sharing, recognition, and stock options;
 - (I) explain the ethical and public relations issues regarding executive compensation; and
 - (J) research contemporary cases dealing with executive compensation using appropriate online technology.
- (9) The student masters the intricacies of creating and implementing a benefits plan. The student is expected to:
 - (A) explain the federally mandated benefits, including Federal Insurance Contributions Act Tax, Federal Unemployment Tax Act, workers' compensation, Consolidated Omnibus Budget Reconciliation Act, Family and Medical Leave Act, and Older Workers Benefit Protection Act;
 - (B) summarize the major discretionary benefits such as healthcare, payment for time not worked, holidays, vacation, sick leave, personal days off, supplemental unemployment benefits, life insurance, long-term care insurance, retirement, pension plans, and thrift plans; and
 - (C) explain the ancillary services sometimes offered to employees such as employee assistance plans, personal counseling, child and elder care, credit unions, cafeterias, employee discounts, legal services, and recreation and health clubs.
- (10) The student discusses the importance of workplace safety and health rules and regulations. The student is expected to:
 - (A) interpret the Occupational Safety and Health Act;
 - (B) explain the right-to-know laws;
 - (C) construct a program promoting safety awareness;
 - (D) explain the necessity of enforcing workplace safety rules;
 - (E) explain the processes for recording and investigating workplace accidents;
 - (F) demonstrate what can be done to prevent or address workplace violence;
 - (G) explain what can be done to address employee stresses in the workplace; and
 - (H) research contemporary cases addressing workplace violence using appropriate online technology.
- (11) The student discusses employee-management relations. The student is expected to:
 - (A) explain employee rights versus employer responsibilities;
 - (B) describe how to implement disciplinary policies and procedures;
 - (C) identify the proper methods of discharging employees;
 - (D) define the concept of Alternative Dispute Resolution;
 - (E) summarize the major federal labor relations laws, including Railway Labor Act, Norris-LaGuardia Act, Wagner Act, and Landrum-Griffin Act;
 - (F) describe the reasons why employees unionize;
 - (G) explain what employers can and cannot do during the unionization process;
 - (H) explain the structure and functions of a union;
 - (I) discuss the major union organizations such as AFL-CIO, national unions, local unions, and international unions;

- (J) summarize the collective bargaining process and the issues typically negotiated such as wages, hours, and working conditions;
- (K) explain a typical grievance procedure;
- (L) define grievance arbitration;
- (M) explain the contemporary challenges facing labor organizations and unions, including foreign competition, technological change, decline in union membership, and employers' focus on maintaining good working conditions to maintain non-union status; and
- (N) research contemporary cases on labor relations using appropriate online technology.
- (12) The student analyzes the future global considerations impacting human resources. The student is expected to:
 - (A) explain international human resource issues;
 - (B) identify the issues associated with recruiting and selecting employees internationally;
 - (C) discuss how to deal with compensation issues in a host country environment;
 - (D) identify the problems and solutions for addressing international employee evaluations and appraisals; and
 - (E) explain the international organized labor environment.
- (13) The student knows self-development techniques and interpersonal skills to accomplish human resources objectives. The student is expected to:
 - (A) identify and practice effective interpersonal and team-building skills involving situations with coworkers, supervisors, and subordinates; and
 - (B) participate in leadership and career development activities.

§130.143. Practicum in Business Management (Two ~~to Three~~ Credits), Adopted 2015.

- (a) General requirements. This course is recommended for students in Grades 11 and 12. Recommended prerequisites: Touch System Data Entry and Business Management or Business Information Management II. ~~Students shall be awarded two credits for successful completion of this course. A student may repeat this course once for credit provided that the student is experiencing different aspects of the industry and demonstrating proficiency in additional and more advanced knowledge and skills.~~
 - ~~[(1) A student shall be awarded two credits for successful completion of this course when the student participates in at least an average of 10 hours, but less than 15 hours, per week of a paid or unpaid, laboratory or work based application of previously studied knowledge and skills related to the Business Management and Administration Career Cluster.]~~
 - ~~[(2) A student shall be awarded three credits for successful completion of this course when the student participates in an average of 15 hours or more per week of a paid or unpaid, laboratory or work-based application of previously studied knowledge and skills related to the Business Management and Administration Career Cluster.]~~
- (b) Introduction.
 - (1) Career and technical education instruction provides content aligned with challenging academic standards and relevant technical knowledge and skills for students to further their education and succeed in current or emerging professions.
 - (2) The Business Management and Administration Career Cluster focuses on careers in planning, organizing, directing, and evaluating business functions essential to efficient and productive business operations.
 - (3) Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid

arrangement and a variety of locations appropriate to the nature and level of experience. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

- (4) Students are encouraged to participate in extended learning experiences such as career and technical student organizations and other leadership or extracurricular organizations.
- (5) Statements that contain the word "including" reference content that must be mastered, while those containing the phrase "such as" are intended as possible illustrative examples.

(c) Knowledge and skills.

- (1) The student demonstrates professional standards/employability skills required by business and industry. The student is expected to:
 - (A) communicate effectively with others using oral and written skills;
 - (B) demonstrate collaboration skills through teamwork;
 - (C) demonstrate professionalism by conducting oneself in a manner appropriate for the profession and workplace;
 - (D) demonstrate a positive, productive work ethic by performing assigned tasks as directed;
 - (E) comply with all applicable rules, laws, and regulations; and
 - (F) demonstrate time-management skills by prioritizing tasks, following schedules, and tending to goal-relevant activities in a way that uses time wisely and optimizes efficiency and results.
- (2) The student identifies and implements employability skills to gain a position in a company. The student is expected to:
 - (A) assess personal marketability;
 - (B) practice job-search strategies, including:
 - (i) write a letter of application;
 - (ii) prepare a resume;
 - (iii) use networking techniques to identify employment opportunities; and
 - (iv) complete a job application;
 - (C) demonstrate proper interview techniques and professional dress and appearance;
 - (D) interview for a job, performing proper interview techniques and modeling professional dress and appearance;
 - (E) practice appropriate follow-up etiquette procedures, including:
 - (i) write a thank you note; and
 - (ii) write a follow-up letter after a job interview;
 - (F) identify skills and attributes necessary for professional advancement;
 - (G) evaluate and compare employment options such as salaries, benefits, and prerequisites;
 - (H) identify and rank tangible and intangible rewards of work; and

- (I) identify employment opportunities and complete job search procedures such as job applications and W-4.
- (3) The student demonstrates professional standards as required by business and industry. The student is expected to:
 - (A) adhere to policies and procedures;
 - (B) demonstrate positive work behaviors and attitudes, including punctuality, time-management, initiative, and cooperation;
 - (C) apply ethical reasoning to a variety of situations in order to make ethical decisions; and
 - (D) complete tasks with the highest standards to ensure quality products and services.
- (4) The student develops and demonstrates skills for success in the workplace. The student is expected to:
 - (A) explain the importance of and model appropriate dress, hygiene, and demeanor for the work assignment;
 - (B) exhibit productive work habits and attitudes, including accepting constructive criticism; and
 - (C) prioritize work to fulfill responsibilities, meet deadlines, and complete tasks with the highest standards to ensure quality products and services.
- (5) The student applies principles of effective interpersonal skills. The student is expected to:
 - (A) demonstrate professional qualities, including positive attitude, loyalty, and diplomacy;
 - (B) identify and demonstrate skills needed to maintain effective work relations with relevant parties such as colleagues and customers;
 - (C) demonstrate a respect for different workplace cultures and individuals from different cultures, genders, and backgrounds;
 - (D) understand rights and responsibilities concerning sexual harassment in the workplace;
 - (E) apply tact in handling criticism and disagreement or disappointment, accept constructive criticism, and revise personal views when valid evidence warrants;
 - (F) explain the concepts of integrity and confidentiality as related to the office environment; and
 - (G) demonstrate methods for implementing and improving customer satisfaction.
- (6) The student demonstrates leadership and teamwork skills in collaborating with others to accomplish goals and objectives. The student is expected to:
 - (A) analyze leadership in relation to trust, positive attitude, integrity, and willingness to accept key responsibilities in a work situation;
 - (B) demonstrate teamwork skills through working cooperatively with others to achieve goals;
 - (C) demonstrate teamwork processes that promote team building, consensus, continuous improvement, respect for the opinions of others, cooperation, adaptability, and conflict resolution;
 - (D) demonstrate responsibility for shared group and individual work tasks; and
 - (E) establish and maintain effective working relationships by:
 - (i) demonstrating interpersonal skills;
 - (ii) using positive interpersonal skills to work cooperatively with others;
 - (iii) negotiating effectively to arrive at decisions; and

- (iv) demonstrating sensitivity to and value for diversity.
- (7) The student facilitates internal and external office communications to support work activities. The student is expected to:
 - (A) record messages accurately, legibly, and completely;
 - (B) deliver messages to the appropriate person or department;
 - (C) coordinate arrangements for participants;
 - (D) follow calling and login procedures; and
 - (E) troubleshoot any problems.
- (8) The student abides by risk-management policies and procedures for technology to minimize loss. The student is expected to:
 - (A) adhere to technology safety and security policies such as acceptable use policy and web page policies;
 - (B) apply ergonomic techniques to technology tasks;
 - (C) adhere to laws pertaining to computer crime, fraud, and abuse;
 - (D) follow procedures used to restart and recover from situations such as system failure and virus infection;
 - (E) follow policies to prevent loss of data integrity; and
 - (F) adhere to the organization's policies for technology use.
- (9) The student uses information technology tools to manage and perform work responsibilities. The student is expected to:
 - (A) demonstrate advanced web search skills;
 - (B) demonstrate advanced word-processing skills by:
 - (i) identifying customary styles of business documents such as memoranda, letters, emails, and reports;
 - (ii) inputting data using the touch system;
 - (iii) demonstrating basic writing techniques such as correct memorandum format, informal or formal style, and direct or indirect layout;
 - (iv) applying correct grammar, spelling, punctuation, and other English mechanics; and
 - (v) using references and preparing notations;
 - (C) apply advanced presentation applications;
 - (D) demonstrate advanced spreadsheet applications by:
 - (i) entering labels and values into spreadsheet cells;
 - (ii) formatting labels and values;
 - (iii) preparing tables, graphs, infographics and graphics;
 - (iv) developing formulas and entering appropriate functions; and
 - (v) verifying formulas and functions with sample values;
 - (E) construct advanced database applications;
 - (F) perform scheduling functions electronically to facilitate on-time, prompt completion of work activities by:

- (i) creating a calendar or schedule;
 - (ii) maintaining an appointment calendar;
 - (iii) verifying appointments;
 - (iv) coordinating travel arrangements;
 - (v) setting up meeting arrangements; and
 - (vi) disseminating meeting information to appropriate persons; and
- (G) enter data without error.
- (10) The student manages personal finances to achieve financial goals. The student is expected to:
 - (A) develop a budget based on personal financial goals;
 - (B) interpret a pay stub;
 - (C) read and reconcile bank statements;
 - (D) maintain financial records;
 - (E) demonstrate the wise use of credit;
 - (F) validate a credit history;
 - (G) protect against identity theft; and
 - (H) prepare personal income tax forms, including the 1040E.
- (11) The student establishes procedures to maintain equipment and supplies. The student is expected to:
 - (A) determine equipment needed;
 - (B) determine supplies needed;
 - (C) establish equipment and supplies maintenance systems;
 - (D) schedule equipment maintenance; and
 - (E) use equipment and supplies maintenance procedures.
- (12) The student applies concepts of critical thinking and problem solving. The student is expected to:
 - (A) analyze elements of a problem to develop creative and innovative solutions;
 - (B) critically analyze information to determine value to the problem-solving task;
 - (C) compare and contrast alternatives using a variety of problem-solving and critical-thinking skills; and
 - (D) conduct technical research to gather information necessary for decision making.