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

Subchapter C. Arts, Audio/Video Technology, and Communications

Statutory Authority: The provisions of this Subchapter C issued under the Texas Education Code, §§7.102(c)(4), 28.002, 28.00222, and 28.025, unless otherwise noted.

§130.81. Implementation of Texas Essential Knowledge and Skills for Arts, Audio/Video Technology, and Communications, 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 §§130.82-130.122 of this subchapter.

(c) If the commissioner makes the determination that instructional materials funding has been made available under subsection (b) of this section, §§130.82-130.122 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 §§130.82-130.122 of this subchapter shall be implemented for the following school year.

Source: The provisions of this §130.81 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.82. Principles of Arts, Audio/Video Technology, and Communications (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grade 9. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in the Arts, Audio/Video Technology, and Communications Career Cluster require a creative aptitude, a strong background in computer and technology applications, a strong academic foundation, and a proficiency in oral and written communication. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities.

(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) explore opportunities in training, education, and certifications for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment;

(D) create a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples; and

(E) demonstrate skills in evaluating and comparing employment opportunities.

(2) The student applies English language arts in Arts, Audio/Video Technology, and Communications projects. The student is expected to:

(A) demonstrate use of content, technical concepts, and vocabulary;

(B) use correct grammar, punctuation, and terminology to write and edit documents;

(C) identify assumptions, purpose, and propaganda techniques;

(D) compose and edit copy for a variety of written documents;

(E) evaluate oral and written information; and

(F) research topics for the preparation of oral and written communication.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language structure and style for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills to obtain and clarify information;

(F) develop and interpret tables, charts, and figures to support written and oral communications;

(G) listen to and speak with diverse individuals; and

(H) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student uses technology applications when completing Arts, Audio/Video Technology, and Communications projects and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for Arts, Audio/Video Technology, and Communications projects; and

(B) use processes such as personal information management, file management, and file sharing.

(6) The student understands arts, audio/video technology, and communications systems. The student is expected to:

(A) describe the nature and types of businesses in arts, audio/video technology, and communications;

(B) analyze and summarize the history and evolution of the arts, audio/video technology, and communications fields of study;

(C) analyze the arts, audio/video technology, and communications economic base; and

(D) analyze and summarize evidence of interdependence between the technical and the artistic sides of arts, audio/video technology, and communications.

(7) The student understands principles of audio/video production. The student is expected to:

(A) apply knowledge of audio and video script production;

(B) discuss the impact of audio and video selection on human emotion;

(C) demonstrate the use of audio and video for a three-screen environment, including cell phones, television monitors, and computer screens;

(D) demonstrate various videography techniques, including picture composition, video composition, audio composition, editing, and delivery;

(E) understand the differences between linear and nonlinear systems; and

(F) demonstrate knowledge of control peripherals for capturing or ingesting media.

(8) The student understands principles of fashion design that impact consumer purchasing of fashion and apparel accessories. The student is expected to:

(A) describe social, cultural, and life cycle influences;

(B) explain how fashion trends are determined; and

(C) analyze the influence of advertising on consumer apparel choices.

(9) The student understands principles of video game design. The student is expected to:

(A) demonstrate knowledge and appropriate use of computer operating systems;

(B) demonstrate appropriate use of hardware components, software programs, and storage devices;

(C) demonstrate knowledge of sound editing;

(D) demonstrate knowledge of file formats and cross-platform compatibility;

(E) acquire and exchange information in a variety of electronic file sharing formats; and

(F) combine graphics, images, and sound.

(10) The student understands principles of graphic design and illustration. The student is expected to:

(A) research the history of visual arts and design;

(B) explain the evolution of art and design;

(C) compare current visual arts technologies with historical technologies;

(D) understand general characteristics in artwork from a variety of cultures; and

(E) analyze and apply art elements and principles in photographic works, multimedia applications, and digital and print media.

(11) The student understands principles of commercial photography. The student is expected to:

(A) demonstrate knowledge of photographic composition and layout; and

(B) evaluate photographs using principles of art, commercial photography standards, and critical-thinking skills.

(12) The student understands principles, elements, and techniques of animation. The student is expected to:

(A) describe and use audience identification, script writing, character design, storyboarding, and audio and delivery formats;

(B) describe and use cell, stop motion, tweening, motion paths, masking, looping, scripting/programming, and interactivity;

(C) describe lighting and camera shots; and

(D) describe and use flip books, claymation, or cut-outs;

(13) The student understands principles of printing and imaging. The student is expected to:

(A) identify processes required for the production of various printed products;

(B) identify basic design elements such as text, graphics, and white space; and

(C) demonstrate basic knowledge of color theory.

(14) The student applies safety regulations. The student is expected to:

(A) implement personal and classroom safety rules and regulations; and

(B) follow emergency procedures as needed.

(15) The student identifies and develops leadership characteristics. The student is expected to:

(A) identify leadership characteristics; and

(B) participate in student leadership and professional development activities.

(16) The student applies ethical decision making and understands and complies with laws regarding use of technology in arts, audio/video technology, and communications. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and giving proper credit for ideas;

(B) examine the First Amendment, Federal Communications Commission regulations, Freedom of Information Act, liability laws, and other regulations for compliance issues;

(C) examine the liabilities, copyright laws, fair use, and duplication of materials associated with productions and performances;

(D) analyze the impact of arts, audio/video technology, and communications industries on society;

(E) demonstrate an understanding of proper digital etiquette, personal security guidelines, use of network resources, and the district's acceptable use policy for technology; and

(F) identify and demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, listening attentively to speakers, willingness to learn new knowledge and skills, and pride in quality work.

(17) The student understands communications strategies as they relate to arts, audio/video technology, and communications. The student is expected to:

(A) adapt the language and design of a project for audience, purpose, situation, and intent;

(B) organize oral, written, and graphic information into formal and informal projects;

(C) interpret and communicate information for multiple audiences; and

(D) collaborate to create original projects, including seeking and responding to advice from others such as peers or experts in the creation and evaluation process.

(18) The student uses a variety of strategies to plan, obtain, evaluate, and use valid information. The student is expected to:

(A) obtain print and digital information such as graphics, audio, and video from a variety of resources while citing the sources;

(B) evaluate information for accuracy and validity; and

(C) present accurate information using techniques appropriate for the intended audience.

(19) The student applies technical skills for efficiency. The student is expected to:

(A) employ planning and time-management skills to complete work tasks; and

(B) use technology to enhance productivity.

(20) The student develops a basic understanding of arts, audio/video technology, and communications. The student is expected to:

(A) research the scope of career opportunities;

(B) develop an understanding of the elements and principles of art;

(C) develop an understanding of the industry by explaining the history and evolution of the arts, audio/video technology, and communications career fields and defining and using related terminology;

(D) evaluate works of art using critical-thinking skills;

(E) determine the use of art elements such as color, texture, form, line, and space; and

(F) determine the use of principles of design such as continuity, pattern, rhythm, balance, proportion, and unity in products.

(21) The student makes informed judgments about product designs and the designs of others. The student is expected to:

(A) interpret, evaluate, and justify artistic decisions; and

(B) select and analyze original product designs by peers and others to form precise conclusions about formal qualities and historical and cultural contexts, intents, and meanings.

Source: The provisions of this §130.82 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.83. Animation I (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Art I or Principles of Art, Audio/Video Technology, and Communications. Recommended corequisite: Animation I Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in animation span all aspects of motion graphics. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the history and techniques of the animation industry.

(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) identify and participate in training, education, or certification for employment;

(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment;

(D) create a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(E) demonstrate skills in evaluating and comparing employment opportunities; and

(F) examine employment opportunities in entrepreneurship.

(2) The student applies academic knowledge and skills in animation projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student understands professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and employs problem-solving methods and conflict-management skills. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, and presentation applications for animation projects.

(6) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) demonstrate leadership skills independently and in a group setting;

(B) conduct and participate in groups; and

(C) model mentoring skills.

(8) The student applies ethical decision making and understands and complies with laws regarding use of technology in animation. The student is expected to:

(A) exhibit ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and giving proper credit for ideas;

(B) discuss and apply copyright laws;

(C) model respect of intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies; and

(E) analyze the impact of the animation industry on society.

(9) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(10) The student develops an understanding of animation technology. The student is expected to:

(A) demonstrate appropriate use of hardware components, software programs, and storage devices;

(B) demonstrate knowledge of sound editing;

(C) demonstrate knowledge of file formats and cross-platform compatibility; and

(D) acquire and exchange information in a variety of electronic file sharing formats.

(11) The student evaluates visual information. The student is expected to:

(A) recognize the use of principles and elements of design; and

(B) recognize the use of typography.

(12) The student uses an appropriate design process to create and modify solutions to problems. The student is expected to:

(A) combine graphics, images, and sound;

(B) apply principles of design;

(C) develop and reference technical documentation; and

(D) edit products.

(13) The student creates animation projects. The student is expected to:

(A) use a variety of techniques and software programs; and

(B) publish and deliver products using a variety of media.

(14) The student researches the history and evolution of animation. The student is expected to:

(A) explain the history of animation;

(B) describe how changing technology is affecting the industry;

(C) analyze the use of symbols in the animation of diverse cultures;

(D) compare current animation technologies with historical technologies;

(E) compare various styles of animation; and

(F) explore emerging and innovative animation technologies and software.

(15) The student understands and applies animation principles, elements, and techniques. The student is expected to:

(A) describe and use audience identification, script writing, character design, storyboarding, and audio and delivery formats;

(B) describe and use cells, stop motion, tweening, motion paths, masking, looping, scripting/programming, and interactivity;

(C) describe lighting and camera shots;

(D) describe and use flip books, claymation, or cut-outs;

(E) render; and

(F) describe and use postproduction processes such as editing and creating titles, credits, and special effects.

(16) The student presents oral or written evaluations of animation projects. The student is expected to:

(A) identify the intended audience;

(B) describe aesthetics;

(C) explain the storyline;

(D) summarize subject matter; and

(E) discuss the use of sound.

Source: The provisions of this §130.83 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.84. Animation I Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Art I and Principles of Arts, Audio/Video Technology, and Communications. Corequisite: Animation I. This course must be taken concurrently with Animation I and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Animation I to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in animation span all aspects of motion graphics. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the history and techniques of the animation industry.

(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) identify and participate in training, education, or certification for employment;

(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment;

(D) create a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(E) demonstrate skills in evaluating and comparing employment opportunities; and

(F) examine employment opportunities in entrepreneurship.

(2) The student applies academic knowledge and skills in animation projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, and fractions and knowledge of arithmetic operations.

(3) The student understands professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and employs problem-solving methods and conflict-management skills. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, and presentation applications for animation projects.

(6) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) demonstrate leadership skills independently and in a group setting;

(B) conduct and participate in groups; and

(C) model mentoring skills.

(8) The student applies ethical decision making and understands and complies with laws regarding use of technology in animation. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and giving proper credit for ideas;

(B) discuss and apply copyright laws;

(C) model respect of intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies; and

(E) analyze the impact of the animation industry on society.

(9) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(10) The student develops an understanding of animation technology. The student is expected to:

(A) demonstrate appropriate use of hardware components, software programs, and storage devices;

(B) demonstrate knowledge of sound editing;

(C) demonstrate knowledge of file formats and cross-platform compatibility; and

(D) acquire and exchange information in a variety of electronic file sharing formats.

(11) The student evaluates visual information. The student is expected to:

(A) recognize the use of principles and elements of design; and

(B) recognize the use of typography.

(12) The student uses an appropriate design process to create and modify solutions to problems. The student is expected to:

(A) combine graphics, images, and sound;

(B) apply principles of design;

(C) develop and reference technical documentation; and

(D) edit products.

(13) The student creates animation projects. The student is expected to:

(A) use a variety of techniques and software programs; and

(B) publish and deliver the product using a variety of media.

(14) The student researches the history and evolution of animation. The student is expected to:

(A) explain the history of animation;

(B) describe how evolving technology is affecting the industry;

(C) analyze the use of symbols in the animation of diverse cultures;

(D) compare current animation technologies with historical technologies;

(E) compare various styles of animation; and

(F) explore emerging and innovative animation technologies and software.

(15) The student understands and applies animation principles, elements, and techniques. The student is expected to:

(A) describe and use audience identification, script writing, character design, storyboarding, and audio and delivery formats;

(B) describe and use cells, stop motion, tweening, motion paths, masking, looping, scripting/programming, and interactivity;

(C) describe lighting and camera shots;

(D) describe and use flip books, claymation, or cut-outs;

(E) render; and

(F) describe and use postproduction processes such as editing and creating titles, credits, and special effects.

(16) The student presents oral or written evaluations of animation projects. The student is expected to:

(A) identify the intended audience;

(B) describe aesthetics;

(C) explain the storyline;

(D) summarize subject matter; and

(E) discuss the use of sound.

Source: The provisions of this §130.84 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.85. Animation II (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Animation I. Recommended corequisite: Animation II Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in animation span all aspects of motion graphics. Within this context, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to create two- and three-dimensional animations. The instruction also assists students seeking careers in the animation industry.

(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) participate in training, education, or certification for employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment to find and obtain a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills; and

(D) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples.

(2) The student applies academic knowledge and skills in animation projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and employs problem-solving methods and conflict-management skills. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, and presentation applications for animation projects.

(6) The student understands animation systems. The student is expected to analyze and summarize the history and evolution of the animation field.

(7) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(8) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(C) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(D) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time, producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(E) employ mentoring skills to inspire and teach others.

(9) The student applies ethical decision making and complies with laws regarding use of technology in animation. The student is expected to:

(A) exhibit ethical conduct;

(B) apply copyright laws;

(C) model respect for intellectual property; and

(D) demonstrate proper etiquette and knowledge of acceptable use policies.

(10) The student applies advanced technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student develops an advanced technical understanding of animation. The student is expected to:

(A) operate communication systems to prepare and conduct verbal and visual communication;

(B) use production elements such as transitions, edits, framing, angle, and lighting techniques;

(C) use orthographic and isometric drawing techniques; and

(D) demonstrate familiarity with commercial production applications.

(12) The student demonstrates animation principles and elements. The student is expected to:

(A) apply animation principles such as arcs, timing, and exaggeration; and

(B) identify animation elements such as cycles, layers, transitions, and transparency.

(13) The student applies the elements and principles of art to animation projects. The student is expected to:

(A) identify animation design elements such as line, color, shape, and texture;

(B) explain the use of additive color theory; and

(C) compare various styles of animation.

(14) The student applies pre-production processes. The student is expected to:

(A) analyze target audience to identify needs and wants;

(B) write and edit scripts;

(C) create storyboards; and

(D) select aspect ratio and frame rate appropriate to delivery method.

(15) The student applies production processes. The student is expected to:

(A) design color and compositional elements;

(B) design characters, environments, and props;

(C) model characters, environments, and props;

(D) light sets or animating lights as needed;

(E) develop rigs for animating characters;

(F) assemble particle systems for visual effects such as rain, snow, and fire;

(G) animate characters, environments, or cameras;

(H) incorporate music and sound effects; and

(I) render scenes.

(16) The student applies post-production processes. The student is expected to:

(A) edit;

(B) produce titles and credits;

(C) add visual effects and processing;

(D) add audio effects and processing; and

(E) produce output.

Source: The provisions of this §130.85 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.86. Animation II Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Animation I. Corequisite: Animation II. This course must be taken concurrently with Animation II and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Animation II to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in animation span all aspects of motion graphics. Within this context, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to create two- and three-dimensional animations. The instruction also assists students seeking careers in the animation industry.

(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) participate in training, education, or certification for employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment to find and obtain a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills; and

(D) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples.

(2) The student applies academic knowledge and skills in animation projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student demonstrates professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and employs problem-solving methods and conflict-management skills. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, and presentation applications for animation projects.

(6) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time, producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(8) The student applies ethical decision making and complies with laws regarding use of technology in animation. The student is expected to:

(A) exhibit ethical conduct;

(B) apply copyright laws;

(C) model respect for intellectual property; and

(D) demonstrate proper etiquette and knowledge of acceptable use policies.

(9) The student applies advanced technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(10) The student develops an advanced technical understanding of animation. The student is expected to:

(A) operate communication systems to prepare and conduct verbal and visual communication;

(B) use production elements such as transitions, edits, framing, angle, and lighting techniques;

(C) use orthographic and isometric drawing techniques; and

(D) demonstrate familiarity with commercial production applications.

(11) The student demonstrates animation principles and elements. The student is expected to:

(A) apply animation principles such as arcs, timing, and exaggeration; and

(B) identify animation elements such as cycles, layers, transitions, and transparency.

(12) The student applies the elements and principles of art to animation projects. The student is expected to:

(A) identify animation design elements such as line, color, shape, and texture;

(B) explain the use of additive color theory; and

(C) compare various styles of animation.

(13) The student applies pre-production processes. The student is expected to:

(A) analyze target audience to identify needs and wants;

(B) write and edit scripts;

(C) create storyboards; and

(D) select aspect ratio and frame rate appropriate to delivery method.

(14) The student applies production processes. The student is expected to:

(A) design color and compositional elements;

(B) design characters, environments, and props;

(C) model characters, environments, and props;

(D) light sets or animating lights as needed;

(E) develop rigs for animating characters;

(F) assemble particle systems for visual effects such as rain, snow, and fire;

(G) animate characters, environments, or cameras;

(H) incorporate music and sound effects; and

(I) render scenes.

(15) The student applies post-production processes. The student is expected to:

(A) edit;

(B) produce titles and credits;

(C) add visual effects and processing;

(D) add audio effects and processing; and

(E) produce output.

Source: The provisions of this §130.86 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.87. Audio/Video Production I (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 9-12. Recommended prerequisite: Principles of Arts, Audio/Video Technology, and Communications. Recommended corequisite: Audio/Video Production I Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in audio and video technology and film production span all aspects of the audio/video communications industry. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the industry with a focus on pre-production, production, and post-production audio and video products.

(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) participate in training, education, or certification for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment; and

(D) create a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples.

(2) The student applies academic knowledge and skills in audio and video projects. The student is expected to:

(A) apply English language arts knowledge and skills by demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of written documents such as scripts, captions, schedules, reports, and manuals; and

(B) apply mathematics knowledge and skills in invoicing and time-based mathematics by demonstrating knowledge of arithmetic operations and applying measurement to solve problems.

(3) The student understands professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent through structure and style;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student uses technology applications and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for audio and video production projects; and

(B) use processes such as personal information management, file management, and file sharing.

(6) The student understands the evolution and current trends of the audio and video production industry. The student is expected to:

(A) summarize the history and evolution of the audio and video production industry; and

(B) analyze the current trends of the audio and video production industry.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations;

(B) follow emergency procedures; and

(C) examine and summarize safety-related problems that may result from working on location.

(8) The student develops leadership characteristics. The student is expected to:

(A) employ leadership skills;

(B) employ teamwork and conflict-management skills;

(C) participate in meetings; and

(D) participate in mentoring activities.

(9) The student applies ethical decision making and complies with laws regarding use of technology in audio and video production. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others and providing proper credit for ideas;

(B) discuss and apply copyright laws in relation to fair use and acquisition, trademark laws, and personal privacy laws;

(C) model respect for intellectual property;

(D) analyze the ethical impact of the audio and video production industry on society; and

(E) evaluate audio and video products for accuracy and validity.

(10) The student uses innovative thinking to develop new ideas and processes for solving real-world issues and conveying those ideas to a global audience through a digital product. The student is expected to:

(A) examine real-world issues relating to current topics such as health care, government, business, or education; and

(B) create unique methods and products for audiences beyond the classroom such as school officials, non-profit organizations, higher education officials, government, or other stakeholders.

(11) The student develops career-building characteristics. The student is expected to:

(A) create a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(B) demonstrate skills in evaluating and comparing employment opportunities;

(C) examine and employ professional networking opportunities such as career and technical student organizations, professional social media, and industry professional organizations; and

(D) examine employment opportunities in entrepreneurship.

(12) The student applies technical skills for efficiency. The student is expected to:

(A) employ planning and time-management skills to complete work tasks; and

(B) use technology to enhance productivity.

(13) The student develops a basic understanding of audio and video production. The student is expected to:

(A) understand the audio, video, and film industry, including the history, current practices, and future trends;

(B) explain the beginning and evolution of the audio, video, and film industry;

(C) describe how changing technology is impacting the audio, video, and film industry;

(D) define and use terminology associated with the audio, video, and film industry;

(E) identify various audio tape, tapeless, and file formats and the key elements required in audio scripts;

(F) apply writing skills to develop an audio script;

(G) explain how various styles of music can create a specific emotional impact;

(H) understand various microphones based upon type, pickup patterns, and various audio cables and connectors;

(I) identify the key elements required in video scripts;

(J) apply writing skills to develop a video script;

(K) identify various video tape, tapeless, and file formats;

(L) understand various video cables and connectors;

(M) distinguish between analog and digital formats;

(N) describe various videography techniques, including picture composition, focus, camera and tripod movements, and proper exposure and white balance;

(O) understand the basics of audio and video editing platforms such as differences between linear and nonlinear editing systems; and

(P) describe various digital platforms, including high definition and standard definition.

(14) The student understands the pre-production process. The student is expected to:

(A) design and implement procedures to track trends, set timelines, and evaluate progress for continual improvement in process and product;

(B) respond to advice from peers and professionals;

(C) create technology specifications;

(D) monitor process and product quality using established criteria;

(E) create a script and identify resources needed to begin the production;

(F) identify budgeting considerations for cast, crew, equipment, and location;

(G) analyze the script and storyboard development processes for a successful production;

(H) identify and participate in the team roles required for completion of a production;

(I) identify cast, crew, equipment, and location requirements for a scripted production; and

(J) understand the casting or audition process.

(15) The student understands the post-production process. The student is expected to:

(A) use technology applications to facilitate evaluation of work, both process and product, by evaluating the project's success in meeting established criteria; and

(B) research the best method for promoting the product by identifying and analyzing market research such as market share, audience-measurement ratings, sweeps periods, distribution, product release dates, demographics, target audience, and advertising rates and revenue.

Source: The provisions of this §130.87 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.88. Audio/Video Production I Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 9-12. Recommended prerequisite: Principles of Arts, Audio/Video Technology, and Communications or Digital Media in the Information Technology Career Cluster. Corequisite: Audio/Video Production I. This course must be taken concurrently with Audio/Video Production I and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Audio/Video Production I to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in audio and video technology and film production span all aspects of the audio/video communications industry. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the industry with a focus on pre-production, production, and post-production audio and video products. Requiring a lab corequisite for the course affords necessary time devoted specifically to the production and post-production process.

(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) participate in training, education, or certification for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment; and

(D) create a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples.

(2) The student applies academic knowledge and skills in audio and video projects. The student is expected to:

(A) apply English language arts knowledge and skills by demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of written documents such as scripts, captions, schedules, reports, and manuals; and

(B) apply mathematics knowledge and skills in invoicing and time-based mathematics by demonstrating knowledge of arithmetic operations and applying measurement to solve problems.

(3) The student understands professional communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for audio and video production projects; and

(B) use processes such as personal information management, file management, and file sharing.

(6) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations;

(B) follow emergency procedures; and

(C) identify and report safety-related problems that may result from working on location.

(7) The student develops leadership characteristics. The student is expected to:

(A) employ leadership skills;

(B) employ teamwork and conflict-management skills;

(C) participate in meetings; and

(D) participate in mentoring activities.

(8) The student applies ethical decision making and complies with laws regarding use of technology in audio and video production. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others and providing proper credit for ideas;

(B) apply copyright laws in relation to fair use and acquisition, trademark laws, and personal privacy laws; and

(C) model respect for intellectual property.

(9) The student develops career-building characteristics. The student is expected to:

(A) create a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(B) demonstrate skills in evaluating and comparing employment opportunities;

(C) examine and employ professional networking opportunities such as career and technical student organizations, professional social media, industry professional organizations; and

(D) examine employment opportunities in entrepreneurship.

(10) The student applies technical skills for efficiency. The student is expected to:

(A) employ planning and time-management skills to complete work tasks; and

(B) use technology to enhance productivity.

(11) The student develops a basic understanding of audio and video production. The student is expected to:

(A) use terminology associated with the industries;

(B) apply writing skills to develop an audio script;

(C) apply various styles of music as needed to create a specific emotional impact;

(D) use various audio tape, tapeless, and file formats;

(E) use various microphones based upon type and pickup patterns; and

(F) use various audio cables and connectors.

(12) The student employs knowledge regarding use of video. The student is expected to:

(A) apply writing skills to develop a video script;

(B) use various video tape, tapeless, and file formats;

(C) use various video cables and connectors;

(D) demonstrate operation of video cameras; and

(E) demonstrate how to properly maintain video equipment;

(13) The student employs various videography techniques. The student is expected to:

(A) demonstrate how to frame and maintain picture composition;

(B) demonstrate focusing techniques;

(C) demonstrate camera and tripod movements; and

(D) demonstrate proper exposure and white balance.

(14) The student edits basic audio and video productions. The student is expected to:

(A) demonstrate skills required for editing using linear and nonlinear systems; and

(B) employ knowledge of control peripherals for capturing or ingesting media.

(15) The student understands the pre-production process. The student is expected to:

(A) implement procedures to track trends, set timelines, and evaluate progress for continual improvement in process and product;

(B) respond to advice from peers and professionals;

(C) create technology specifications;

(D) monitor process and product quality using established criteria;

(E) create a script and identify resources needed to begin the production;

(F) apply budgeting considerations for cast, crew, equipment, and location;

(G) analyze the script and storyboard for a successful production;

(H) participate in the team roles required for completion of a production; and

(I) employ cast, crew, equipment, and location for a scripted production.

(16) The student understands the production process. The student is expected to:

(A) implement a coherent sequence of events to successfully produce a script;

(B) use lighting techniques, including three-point lighting, reflected light, color temperatures, and lighting filters;

(C) employ audio techniques, including microphone variances and sound mixing; and

(D) demonstrate knowledge of interpersonal skills with sensitivity to diversity when directing crew or talent.

(17) The student understands the post-production process. The student is expected to:

(A) demonstrate knowledge of video systems such as digital and analog systems, software applications, and communication and network components;

(B) make appropriate decisions regarding the selection of software;

(C) make necessary adjustments regarding compatibility issues, including digital file formats and cross-platform connectivity;

(D) apply animation effects using character generators, fonts, colors, and principles of composition to create graphic images, captions, or titles for video and graphics;

(E) demonstrate proficiency in the use of a variety of electronic input devices;

(F) use a variety of strategies to acquire information from online resources;

(G) acquire electronic information in a variety of formats;

(H) use different compression standards and techniques to output for distribution;

(I) format digital information for effective communication with a defined audience using appropriate font attributes and color, white space and graphics, and camera perspective;

(J) use appropriate content selection and presentation;

(K) understand target audiences and demographics;

(L) determine appropriate delivery method based on distribution needs;

(M) deliver products in a variety of media by using various delivery formats such as disk, broadcast, cellular, portable device, electronic, and online delivery;

(N) use appropriate computer-based productivity tools to create and modify solutions to problems;

(O) create audio and video technology products for a variety of purposes and audiences;

(P) develop technical documentation related to audio and video technology; and

(Q) demonstrate innovative uses of a wide range of emerging technologies, including online learning, mobile devices, digital content, and Web 2.0 tools such as podcasting, wikis, and blogs.

Source: The provisions of this §130.88 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.89. Audio/Video Production II (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Audio/Video Production I. Recommended corequisite: Audio/Video Production II Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in audio and video technology and film production span all aspects of the audio/video communications industry. Building upon the concepts taught in Audio/Video Production, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post-production products. This course may be implemented in an audio format or a format with both audio and video.

(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) participate in training, education, or certification for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment; and

(D) create resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples.

(2) The student applies academic knowledge and skills in production projects. The student is expected to:

(A) apply English language arts knowledge and skills by consistently demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of

written documents such as scripts, captions, schedules, reports, manuals, proposals, and other client-based documents; and

(B) apply mathematics knowledge and skills in invoicing and time-based mathematics by consistently demonstrating knowledge of arithmetic operations and applying measurement to solve problems.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent through structure and style;

(B) analyze and organize oral and written information;

(C) analyze, interpret, and communicate information, data, and observations;

(D) create and deliver formal and informal presentations;

(E) apply active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student uses technology applications and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for audio and video production projects; and

(B) use processes such as personal information management, file management, and file sharing.

(6) The student understands the evolution and current trends of the audio and video production industry. The student is expected to:

(A) summarize the history and evolution of the audio and video production industry; and

(B) analyze the current trends of the audio and video production industry.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations;

(B) recognize and resolve potential safety concerns; and

(C) follow emergency procedures.

(8) The student applies leadership characteristics to student organizations and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(9) The student applies ethical decision making and complies with laws regarding use of technology in audio/video production. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others and providing proper credit for ideas;

(B) apply copyright laws in relation to fair use and acquisition, trademark laws, and personal privacy laws;

(C) model respect for intellectual property; and

(D) demonstrate proper etiquette and knowledge of acceptable use policies.

(10) The student develops career-building characteristics. The student is expected to:

(A) update a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(B) demonstrate skills in evaluating and comparing employment opportunities;

(C) examine and employ professional networking opportunities such as career and technical student organizations, professional social media, industry professional organizations; and

(D) examine employment opportunities in entrepreneurship.

(11) The student applies technical skills for efficiency. The student is expected to:

(A) employ planning and time-management skills to complete work tasks; and

(B) use technology to enhance productivity.

(12) The student demonstrates knowledge of audio and video production. The student is expected to:

(A) understand set-up, execution, and trouble-shooting of standard systems for the audio/video industry, including editing systems, wireless and wired transmission systems, cabling, and configurations for production purposes;

(B) employ knowledge of recording equipment usage by explaining analog and digital formats;

(C) describe tape and tapeless formats;

(D) demonstrate the operation of recording devices, including metering a recording signal for proper levels and proper maintenance of recording equipment; and

(E) apply appropriate industry-related terminology.

(13) The student understands the pre-production process. The student is expected to:

(A) apply critical elements, including purpose, target audience, and distribution, in the pre-production stage to identify and evaluate the production;

(B) demonstrate procedures to establish timelines;

(C) develop a budget with considerations for cast, crew, equipment, and location;

(D) write documents of the scripting process such as treatments, storyboards, rundowns, and scripts for various types of programs using proper formatting for the specific type of production document;

(E) identify specific elements needed for successful production such as cast, crew, equipment, location, props, and sound effects;

(F) discuss how various styles of music can create a specific emotional impact;

(G) examine the end goal of the production to determine the appropriate format for recording and distributing;

(H) identify several means to work within budget restraints;

(I) conduct auditions for the talent and secure the crew required for a successful production; and

(J) examine various contracts related to industry tasks, including talent releases for productions, and key elements for contracts such as crew, talent, location, and distribution.

(14) The student understands the business aspects of the industry. The student is expected to:

(A) understand the roles of various industry professionals by identifying and discussing the responsibilities and relationships among the production team, including producers, directors, editors, engineers, talent, additional crew members, and sales team;

(B) understand the opportunities in the industry for freelance entrepreneurs by identifying standard freelance self-promotion techniques, proposals, technology applications for freelance entrepreneurs, best practices for various freelance job responsibilities, and standard billing practices for freelance labor, including invoices and collections rates;

(C) understand the unique characteristics of live productions such as roles, equipment, time accountability, back-timing, time-based mathematics, and financial support; and

(D) identify roles, costs, equipment, and strategies for financially supporting studio and field productions.

(15) The student demonstrates an understanding of regulatory agency guidelines for content appropriateness. The student is expected to:

(A) identify applicable guidelines based on production distribution methods; and

(B) distinguish between Federal Communications Commission (FCC), National Public Radio (NPR), and other regulatory agencies.

(16) The student understands the technical broadcast standards established by the FCC. The student is expected to:

(A) apply knowledge of broadcast formats by distinguishing between analog and digital formats;

(B) describe the difference in data signals and equipment for analog and digital technology;

(C) identify the evolution of the broadcast signal and standards such as High-Definition (HD), Standard-Definition (SDTV), National Television System Committee (NTSC), Phase Alternating Line (PAL), and Sequential Color with Memory (SECAM); and

(D) identify the location of radio and television frequencies in the electromagnetic spectrum.

(17) The student understands the evolution of various media formats. The student is expected to:

(A) identify the evolution of various media formats such as tape, tapeless, film, and electronic; and

(B) identify the evolution and application of digital media formats and compression standards.

Source: The provisions of this §130.89 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.90. Audio/Video Production II Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Audio/Video Production I. Corequisite: Audio/Video Production II. This course must be taken concurrently with Audio/Video Production II and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Audio/Video Production II to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in audio and video technology and film production span all aspects of the audio/video communications industry. Building upon the concepts taught in Audio/Video Production, in addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on pre-production, production, and post-production products. Through diverse forms of storytelling and production, students will exercise and develop creativity, intellectual curiosity, and critical-thinking, problem-solving, and collaborative skills. This course may be implemented in an audio format or a format with both audio and video. Requiring a lab corequisite for the course affords necessary time devoted specifically to the production and post-production process.

(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) participate in training, education, or certification for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment;

(D) update a resume, cover letter/letter of interest, and career portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(E) demonstrate skills in evaluating and comparing employment opportunities.

(2) The student applies academic knowledge and skills in production projects. The student is expected to:

(A) apply English language arts knowledge and skills by consistently demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of written documents such as scripts, captions, schedules, reports, manuals, proposals, and other client-based documents; and

(B) apply mathematics knowledge and skills in invoicing and time-based mathematics by consistently demonstrating knowledge of arithmetic operations and applying measurement to solve problems.

(3) The student develops a perception of self, human relationships, and the world. The student is expected to:

(A) demonstrate the value and purpose of listening, observing, concentrating, cooperating, and using emotional and sensory recall;

(B) develop and practice effective voice and diction;

(C) analyze strategies such as advertising; perpetuating stereotypes; and using visual representations, special effects, and language used by media to inform, persuade, entertain, and transform culture;

(D) explore the emotional and intellectual effects of visual media on viewers; and

(E) analyze how visual and audio techniques such as special effects, editing, camera angles, reaction shots, sequencing, and music convey messages in media.

(4) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent through structure and style;

(B) analyze and organize oral and written information;

(C) analyze, interpret, and communicate information, data, and observations;

(D) create and deliver formal and informal presentations;

(E) apply active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals;

(G) collaborate with others in a production role such as talent, director, producer, videographer, and editor to tell a story through live or recorded productions; and

(H) exhibit public relations skills to increase internal and external customer/client satisfaction.

(5) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups;

(B) employ interpersonal skills in groups to solve problems; and

(C) demonstrate responsibility, artistic discipline, and creative problem solving by concentrating in one or more areas of audio and video production such as directing, producing, writing, videography, and editing.

(6) The student uses technology applications and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for audio and video production projects; and

(B) use processes such as personal information management, file management, and file sharing.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations throughout the production process;

(B) recognize and resolve potential safety concerns; and

(C) follow emergency procedures.

(8) The student applies leadership characteristics to student organizations and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by exhibiting problem-solving and management traits;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(9) The student applies ethical decision making and complies with laws regarding use of technology in audio/video production. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others and providing proper credit for ideas;

(B) apply copyright laws in relation to fair use and acquisition, trademark laws, and personal privacy laws;

(C) model respect for intellectual property; and

(D) demonstrate proper etiquette and knowledge of acceptable use policies.

(10) The student applies technical skills for efficiency. The student is expected to:

(A) employ planning and time-management skills to complete work tasks; and

(B) use technology to enhance productivity.

(11) The student demonstrates an understanding of audio and video production. The student is expected to:

(A) understand set-up, execution, and trouble-shooting of standard systems for the audio/video industry, including editing systems, wireless and wired transmission systems, cabling, and configurations for production purposes;

(B) employ the operation of recording devices, including metering a recording signal for proper levels and proper maintenance of recording equipment; and

(C) apply appropriate industry-related terminology.

(12) The student understands the pre-production process. The student is expected to:

(A) apply critical elements, including purpose, target audience, and distribution, in the pre-production stage by identifying and evaluating the production;

(B) use advanced technology applications to facilitate pre-production by developing a budget with considerations for cast, crew, equipment, and location;

(C) write documents of the scripting process such as treatments, storyboards, rundowns, and scripts for various types of programs;

(D) use proper formatting for the specific type of production document;

(E) identify specific elements of the production document needed for successful production, such as cast, props, and sound effects;

(F) determine artistic impact of production plan;

(G) determine the use of art elements such as color, texture, form, line, and space;

(H) determine the principles of design such as continuity, pattern, rhythm, balance, proportion, and unity in products;

(I) determine cast, crew, equipment, and location requirements for a successful production;

(J) conduct auditions for the talent and secure the crew required for a successful production; and

(K) examine various contracts related to industry tasks by using talent releases for productions.

(13) The student applies the production process. The student is expected to:

(A) apply the coherent sequence of events to successfully produce a script;

(B) use lighting techniques, including three-point lighting, reflected light, color temperatures, lighting filters, lighting gels, and understand lighting and its emotional impact on productions;

(C) demonstrate a knowledge of audio techniques by using various microphone types;

(D) demonstrate an understanding of sound mixing and elements of a final audio mix;

(E) execute production of the script by demonstrating teamwork and knowledge of interpersonal skills with sensitivity to diversity when directing crew and talent;

(F) apply knowledge of the critical elements in designing activities in the production stage;

(G) employ knowledge of digital editing by addressing various distribution formats, including electronic, disk, tapeless, and tape;

(H) ingest media to an editing system for the purpose of manipulating recorded media;

(I) properly monitor equipment to ensure quality recordings;

(J) set appropriate levels before recording by using broadcast standard tools; and

(K) identify standards for logging notes during the recording process.

(14) The student understands the post-production process relating to video systems. The student is expected to:

(A) demonstrate knowledge of video systems such as digital and analog systems, software applications, and communication and network components;

(B) demonstrate an understanding of various input, processing, output, and storage devices;

(C) demonstrate an understanding of compatibility issues, including digital file formats and cross-platform connectivity; and

(D) demonstrate an understanding of high definition and standard definition output media.

(15) The student understands the post-production process relating to animation effects. The student is expected to:

(A) use character generators, fonts, colors, and principles of composition to create graphic images; and

(B) create captions or titles for video and graphics.

(16) The student understands the post-production process relating to output for distribution. The student is expected to:

(A) demonstrate proficiency in outputting production for distribution using various compression standards and techniques;

(B) understand the relationship between file size and quality;

(C) use various delivery formats such as disk, broadcast, cellular, portable devices, electronic, and online delivery;

(D) determine the appropriate delivery method based on distribution needs;

(E) extend the learning environment through digital sharing and gathering such as cloud computing, emerging collaboration technologies, data mining strategies, and mobile technologies;

(F) use appropriate computer-based productivity tools to create and modify solutions to problems;

(G) integrate productivity tools to develop and modify solutions to problems; and

(H) create technical documentation related to project specifications.

(17) The student understands the post-production process relating to level of project success. The student is expected to:

(A) critique production to determine how the various elements resulted in a successful or unsuccessful project; and

(B) recognize and evaluate final production as an art form.

Source: The provisions of this §130.90 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.91. Digital Audio Technology I (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 9-12. Recommended prerequisite: Principles of Arts, Audio/Video Technology, and Communications or Digital Media or both Audio/Video Production I and Audio/Video Production I Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Digital Audio Technology I was designed to provide students interested in audio production careers such as audio for radio and television broadcasting, audio for video and film, audio for animation and game design, music production and live sound, and additional opportunities and skill sets. Digital Audio Technology I does not re-place Audio Video Production courses but is recommended as a single credit, co-curricular course with an audio production technical emphasis. This course can also be paired with Digital Media. Students will be expected to develop an understanding of the audio industry with a technical emphasis on production and critical-listening 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 as required by business and industry. The student is expected to:

(A) participate in training, education, or certification for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment; and

(D) create a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples.

(2) The student applies academic knowledge and skills in audio and video projects. The student is expected to:

(A) apply English language arts knowledge and skills by demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of written documents such as scripts, captions, schedules, reports, and manuals; and

(B) apply mathematics knowledge and skills in invoicing and time-based mathematics by demonstrating knowledge of arithmetic operations and applying measurement to solve problems.

(3) The student understands professional communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for audio production projects; and

(B) use processes such as personal information management, file management, and file sharing.

(6) The student understands the evolution and current trends of the audio industry. The student is expected to:

(A) summarize the history and evolution of the audio production industry; and

(B) analyze the current trends of the audio production industry.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations; and

(B) follow emergency procedures.

(8) The student develops leadership characteristics. The student is expected to:

(A) employ leadership skills;

(B) employ teamwork and conflict-management skills;

(C) participate in meetings; and

(D) participate in mentoring activities.

(9) The student applies ethical decision making and complies with laws and regulations regarding use of technology in audio production. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others and providing proper credit for ideas;

(B) model respect for intellectual property;

(C) analyze the ethical impact of the audio production industry on society;

(D) understand and comply with all copyright and fair use laws; and

(E) understand and comply with all applicable rules and regulations of the associated governing authority such as the Federal Communications Commission (FCC), local school district, or client.

(10) The student develops career-building characteristics. The student is expected to demonstrate skills in evaluating and comparing employment opportunities.

(11) The student applies technical skills for efficiency. The student is expected to:

(A) employ planning and time-management skills to complete work tasks; and

(B) use technology to enhance productivity.

(12) The student develops a basic understanding of the audio production industry. The student is expected to:

(A) identify various career pathways and job opportunities in the audio production industry;

(B) understand the roles of various industry audio professionals such as producers, editors, engineers, and talent as they apply to specific audio production career pathways;

(C) understand the history, current practices, and future trends for audio production careers such as radio and television broadcasting, video and film, animation and game design, music production, and live sound;

(D) describe how the changing technology is impacting the audio industry; and

(E) define and appropriately use terminology associated with the audio production industry.

(13) The student develops a basic understanding of audio production equipment. The student is expected to:

(A) understand types and application of microphones such as dynamic, condenser, ribbon, pressure zone (PZM), universal serial bus (USB), and wireless;

(B) understand pick-up patterns and application of microphones such as cardioid, omni-directional, and figure eight;

(C) understand the operation and application of audio consoles (mixers) such as broadcast consoles, live sound consoles, and recording consoles;

(D) understand the operation and application of audio processing equipment or software such as equalizer (EQ), dynamic compressor, noise gate, band pass filters, reverb, and delays;

(E) understand the operation and application of analog and digital audio recording devices such as handheld recorders, USB interfaces, multi-track devices, and digital audio workstations (DAW);

(F) understand the application of audio interconnect cabling and connectors such as XLR balanced, TRS balanced, TS unbalanced, RCA, ¼" TRS/TS, and mini TRS/TS;

(G) understand the operation and application of additional audio hardware such as musical instrument digital interface (MIDI) controllers, direct boxes, audio splitters, and analog to digital converters as needed; and

(H) understand the types and applications of audio speakers such as broadcast monitors, studio monitors, and live sound speakers.

(14) The student develops an understanding of audio production elements. The student is expected to:

(A) identify key elements (stems) of an audio production such as dialogue, sound effects, music, and environmental;

(B) understand how music styles, sound effects, or vocal performance can create a specific emotional impact;

(C) identify key technical elements of audio production for effect such as panning, ducking, track doubling, retiming, and auto-tune; and

(D) understand and identify digital audio codecs and compression standards such as Waveform Audio (WAV), MP3, and advanced audio coding (AAC).

(15) The student identifies, creates, and obtains required assets for audio production projects. The student is expected to:

(A) identify key elements required in audio scripts;

(B) apply writing skills to develop an audio script; and

(C) create or obtain required audio assets through recording, synthesis, or permissions.

(16) The student develops a basic understanding of a DAW and audio editing. The student is expected to:

(A) understand how to record or import various types of audio content such as audio files, MIDI data or automation;

(B) understand types and application of audio track such as instrument track, master track, auxiliary track, and global attributes track;

(C) understand audio editing tools and transitions such as cut, trim, and fade;

(D) understand the use and application of software plug-ins such as EQ, dynamic compression, reverb, and software instruments;

(E) understand the use and application of software automation; and

(F) understand the various delivery formats such as disk, broadcast, cellular, portable device, electronic, and online delivery.

Source: The provisions of this §130.91 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.92. Digital Audio Technology II (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Digital Audio Technology I. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Digital Audio Technology II was designed to provide additional opportunities and skill sets for students interested in audio production careers such as audio for radio and television broadcasting, audio for video and film, audio for animation and game design, and music production and live sound. Digital Audio Technology II does not replace Audio Video Production courses but is recommended as a single credit, co-curricular course with an audio production technical emphasis. This course can also be paired with Digital Media. Students will be expected to develop an understanding of the audio industry with a technical emphasis on production and critical-listening 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 as required by business and industry. The student is expected to:

(A) participate in training, education, or certification for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment; and

(D) create a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples.

(2) The student applies academic knowledge and skills in audio and video projects. The student is expected to:

(A) apply English language arts knowledge and skills by demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of written documents such as scripts, captions, schedules, reports, and manuals; and

(B) apply mathematics knowledge and skills in invoicing and time-based mathematics by demonstrating knowledge of arithmetic operations and applying measurement to solve problems.

(3) The student understands professional communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for audio production projects; and

(B) use processes such as personal information management, file management, and file sharing.

(6) The student understands the evolution and current trends of the audio industry. The student is expected to:

(A) summarize the history and evolution of the audio production industry; and

(B) analyze the current trends of the audio production industry.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations; and

(B) follow emergency procedures.

(8) The student develops leadership characteristics. The student is expected to:

(A) employ leadership skills;

(B) employ teamwork and conflict-management skills;

(C) participate in meetings; and

(D) participate in mentoring activities.

(9) The student applies ethical decision making and complies with laws and regulations regarding use of technology in audio production. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others and providing proper credit for ideas;

(B) model respect for intellectual property;

(C) analyze the ethical impact of the audio production industry on society;

(D) understand and comply with all copyright and fair use laws; and

(E) understand and comply with all applicable rules and regulations of the associated governing authority such as the Federal Communications Commission (FCC), local school district, or client.

(10) The student develops career-building characteristics. The student is expected to:

(A) create a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(B) examine and employ professional networking opportunities such as career and technical student organizations, professional social media, and industry professional organizations; and

(C) examine employment opportunities in entrepreneurship.

(11) The student applies technical skills for efficiency. The student is expected to:

(A) employ planning and time-management skills to complete work tasks; and

(B) use technology to enhance productivity.

(12) The student develops a basic understanding of the audio production industry. The student is expected to:

(A) identify various career pathways and job opportunities in the audio production industry;

(B) understand the roles of various industry audio professionals such as producers, editors, engineers, and talent as they apply to specific audio production career pathways;

(C) understand the history, current practices, and future trends for audio production careers such as radio and television broadcasting, video and film, animation and game design, music production, and live sound;

(D) describe how the changing technology is impacting the audio industry; and

(E) define and appropriately use terminology associated with the audio production industry.

(13) The student develops a basic understanding of audio production equipment. The student is expected to:

(A) use types and applications of microphones such as dynamic, condenser, ribbon, pressure zone (PZM), universal serial bus (USB), and wireless;

(B) use pick-up patterns and applications of microphones such as cardioid, omni-directional, and figure eight;

(C) demonstrate the operation and application of audio consoles (mixers) such as broadcast consoles, live sound consoles, and recording consoles;

(D) demonstrate the operation and application of audio processing equipment or software such as equalizer (EQ), dynamic compressor, noise gate, band pass filters, reverb, and delays;

(E) demonstrate the operation and application of analog and digital audio recording devices such as handheld recorders, USB interfaces, multi-track devices, and digital audio workstations (DAW);

(F) demonstrate the application of audio interconnect cabling and connectors such as XLR balanced, TRS balanced, TS unbalanced, RCA, ¼" TRS/TS, and mini TRS/TS;

(G) demonstrate the operation and application of additional audio hardware such as musical instrument digital interface (MIDI) controllers, direct boxes, audio splitters, and analog to digital converters as needed; and

(H) use the types and applications of audio speakers such as broadcast monitors, studio monitors, and live sound speakers.

(14) The student develops an understanding of audio production elements. The student is expected to:

(A) consistently identify key elements (stems) of an audio production such as dialogue, sound effects, music, and environmental;

(B) use music styles, sound effects, or vocal performances to create a specific emotional impact;

(C) use key technical elements of audio production for effect such as panning, ducking, track doubling, retiming, and auto-tune; and

(D) use digital audio codecs and compression standards such as Waveform Audio (WAV), MP3, and advanced audio coding (AAC).

(15) The student identifies, creates, and obtains required assets for audio production projects. The student is expected to:

(A) use key elements required in audio scripts;

(B) consistently apply writing skills to develop an audio script; and

(C) create or obtain required audio assets through recording, synthesis, or permissions.

(16) The student develops a basic understanding of a DAW and audio editing. The student is expected to:

(A) demonstrate how to record or import various types of audio content such as audio files, MIDI data, or automation;

(B) use types and application of audio tracks such as audio track, instrument track, master track, auxiliary track, and global attributes track;

(C) use audio editing tools and transitions such as cut, trim, and fade;

(D) demonstrate the use and application of software plug-ins such as EQ, dynamic compression, reverb, and software instruments;

(E) demonstrate the use and application of software automation; and

(F) use the various delivery formats such as disk, broadcast, cellular, portable device, electronic, and online delivery.

Source: The provisions of this §130.92 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.93. Video Game Design (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 9-12. Recommended prerequisite: Principles of Art, Audio/Video Technology, and Communications. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Video Game Design will allow students to explore one of the largest industries in the global marketplace and the new emerging careers it provides in the field of technology. Students will learn gaming, computerized gaming, evolution of gaming, artistic aspects of perspective, design, animation, technical concepts of collision theory, and programming logic. Students will participate in a simulation of a real video game design team while developing technical proficiency in constructing an original game design.

(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) identify and demonstrate positive work behaviors and personal qualities needed to be employable;

(B) demonstrate skills related to seeking and applying for employment;

(C) create a career portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(D) demonstrate skills in evaluating and comparing employment opportunities.

(2) The student applies academic knowledge and skills in video game design projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student understands professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information;

(D) apply active listening skills; and

(E) communicate with diverse individuals.

(4) The student understands and employs problem-solving methods and conflict-management skills. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(6) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) demonstrate leadership skills; and

(B) participate in a group setting.

(7) The student applies ethical decision making and understands and complies with laws regarding use of technology in video game design. The student is expected to:

(A) exhibit ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) discuss and apply copyright laws;

(C) model respect of intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies; and

(E) analyze the impact of the video game design industry on society.

(8) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(9) The student develops an understanding of video game design. The student is expected to:

(A) demonstrate knowledge and appropriate use of computer operating systems;

(B) demonstrate appropriate use of hardware components, software programs, and storage devices;

(C) demonstrate knowledge of sound editing;

(D) demonstrate knowledge of file formats and cross-platform compatibility;

(E) acquire and exchange information in a variety of electronic file sharing formats; and

(F) evaluate visual information by recognizing the use of principles and elements of design.

(10) The students employs an appropriate design process to create and modify solutions to problems. The student is expected to:

(A) combine graphics, images, and sound;

(B) apply principles of design;

(C) develop and reference technical documentation; and

(D) edit products.

(11) The student researches the history and evolution of video game design. The student is expected to:

(A) explain the history of video game design;

(B) describe how changing technology is affecting the industry;

(C) analyze the use of symbols in video game design of diverse cultures;

(D) compare current video game design technologies with historical technologies;

(E) compare various styles of video game design; and

(F) explore emerging and innovative video game design technologies and software.

(12) The student understands and applies video game design principles, elements, and techniques. The student is expected to:

(A) employ audience identification, script writing, character design, storyboarding, and audio and delivery formats;

(B) describe and use motion paths, scripting, programming, and interactivity;

(C) describe lighting and perspective; and

(D) describe and use production processes such as titles, credits, and special effects.

(13) The student evaluates a product using critical-thinking skills. The student is expected to evaluate products and product quality against established criteria and rubrics.

(14) The student presents oral or written evaluations of video game design projects. The student is expected to:

(A) identify the intended audience;

(B) describe aesthetics;

(C) explain the storyline;

(D) summarize subject matter; and

(E) discuss the use of sound.

(15) The student creates video game design projects. The student is expected to use a variety of techniques and software programs.

(16) The student differentiates current programming languages. The student is expected to:

(A) discuss the use of computer programming languages in other fields of study; and

(B) demonstrate knowledge of specific programming terminology and concepts.

(17) The student applies problem-solving strategies. The student is expected to apply design specifications, step-wise refinement, or algorithm development.

(18) The student develops coding with correct and efficient use of expressions. The student is expected to use user-defined functions; proper operator precedence; and sequential, conditional, and repetitive control structures.

(19) The students applies constructive criticism to products. The student is expected to seek and respond to advice from peers and professionals in delineating technological tasks.

(20) The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:

(A) participate with electronic communities as a learner, initiator, contributor, and teacher or mentor;

(B) extend the learning environment beyond the school walls with digital products created to increase teaching and learning in the foundation and enrichment curricula; and

(C) participate in relevant, meaningful activities in the larger community and society to create electronic projects.

(21) The student uses technology applications to facilitate evaluation of communication processes and products. The student is expected to:

(A) write technology specifications for planning/evaluation rubrics documenting variables, prompts, and programming code internally and externally; and

(B) debug and solve problems using reference materials and effective strategies.

(22) The student understands technology concepts, systems, and operations as they apply to game programming. The student is expected to:

(A) identify basic game components, including the game engine, game play subsystems, data structures, models, and interfaces;

(B) generate random numbers in a program;

(C) create a program implementing conditional statements;

(D) develop an appropriate data model;

(E) demonstrate an understanding of and apply object-oriented game programming;

(F) demonstrate an understanding of game programming essentials, including event-driven programming, communicating with messages, and device management;

(G) demonstrate an understanding of the role of game events, the animation loop, and game timing;

(H) demonstrate an understanding of the role of game engines;

(I) apply basic game screen design and layout, including visual controls, user interfaces, menus, and options;

(J) use game control design to understand, access, and control input devices;

(K) demonstrate an understanding of and apply game animation, including the principles of animation and frame-based animation;

(L) demonstrate an understanding of game events, including listeners, triggers, and timed events;

(M) demonstrate an understanding of and implement collision detection, including models and sprite collisions;

(N) demonstrate an understanding of player progression, including leveling, linear progression, and maintaining high score data; and

(O) demonstrate an understanding of algorithmic decision making.

Source: The provisions of this §130.93 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.94. Printing and Imaging Technology I (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 9-12. Recommended corequisite: Printing and Imaging Technology I Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. In addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the printing industry with a focus on digital prepress and digital publishing.

(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) identify appropriate training, education, or certification for printing and imaging technology employment;

(B) recognize positive work behaviors and personal qualities needed to be employable; and

(C) describe skills related to seeking, applying for, and obtaining a desired job.

(2) The student applies academic knowledge and skills in printing and imaging projects. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse groups of individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for printing and imaging projects.

(6) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations; and

(B) follow emergency procedures.

(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ communication skills;

(B) employ teamwork and conflict-management skills;

(C) conduct and participate in meetings; and

(D) employ mentoring skills.

(8) The student applies ethical decision making and understands and complies with laws regarding use of technology in printing. The student is expected to:

(A) demonstrate an understanding of ethical conduct;

(B) understand copyright laws in relation to fair use and duplication of materials; and

(C) understand Creative Commons laws, including all licensing.

(9) The student develops career-building characteristics. The student is expected to:

(A) understand the use and importance of a portfolio in documenting information such as work experiences, licenses, certifications, and work samples;

(B) demonstrate skills in evaluating and comparing employment opportunities; and

(C) examine employment opportunities in entrepreneurship.

(10) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student develops a basic understanding of printing and imaging. The student is expected to:

(A) understand printing systems and their uses;

(B) describe the processes required for the production of various printed products;

(C) explain the impact of the printing industry on the U.S. economy;

(D) understand the impact of emerging technologies in hardware and software applications;

(E) understand how to manage the printing process, including customer service and sales, scheduling, and quality control;

(F) describe materials used in various printing projects;

(G) understand how to acquire information in a variety of formats;

(H) evaluate information for accuracy, validity, and usability;

(I) compare the features of graphics programs used in digital printing;

(J) explain how design elements such as text, graphics, headlines, use of color, and white space affect usability;

(K) explain the principles of typography, including font size and style;

(L) explain color theory and its use in the design process;

(M) identify graphic design concepts such as contrast, alignment, repetition, and proximity;

(N) reference technical documentation;

(O) understand file and cross-platform compatibility;

(P) identify and use the principles of design to discuss, analyze, critique, and write about visual aspects in print design, including the student's own designs; and

(Q) demonstrate knowledge of the principles of design in print design images, with a focus on composition, color, design, shape, shadow, negative space, and background.

(12) The student researches the history of the printing and imaging field. The student is expected to analyze and summarize the evolution of the printing and imaging field and its historical impact on society.

Source: The provisions of this §130.94 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.95. Printing and Imaging Technology I Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 9-12. Corequisite: Printing and Imaging Technology I. This course must be taken concurrently with Printing and Imaging Technology I and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Printing and Imaging Technology I to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. In addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to demonstrate an understanding of the printing industry with a focus on digital prepress and digital publishing.

(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) identify and participate in training, education, or certification for printing and imaging technology employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable; and

(C) demonstrate skills related to seeking, applying for, and obtaining a desired job.

(2) The student applies academic knowledge and skills in printing and imaging projects. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for printing and imaging projects.

(6) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations; and

(B) follow emergency procedures.

(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ communication skills;

(B) employ teamwork and conflict-management skills;

(C) conduct and participate in meetings; and

(D) employ mentoring skills.

(8) The student applies ethical decision making and understands and complies with laws regarding use of technology in printing. The student is expected to:

(A) demonstrate an understanding of ethical conduct;

(B) apply copyright laws in relation to fair use and duplication of materials;

(C) model respect for intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies; and

(E) demonstrate an understanding of Creative Commons laws, including all licensing.

(9) The student develops career-building characteristics. The student is expected to:

(A) maintain a portfolio to document information such as work experiences, licenses, certifications, and work samples;

(B) demonstrate skills in evaluating and comparing employment opportunities; and

(C) examine employment opportunities in entrepreneurship.

(10) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student develops a basic understanding of printing and imaging. The student is expected to:

(A) understand printing systems and their uses;

(B) employ processes required for the production of various printed products;

(C) demonstrate print process management, including customer service and sales, scheduling, and quality control;

(D) evaluate customer needs and materials;

(E) acquire information in a variety of formats;

(F) evaluate information for accuracy, validity, and usability;

(G) apply digital publishing techniques to create products by using word processing, graphics, or drawing programs;

(H) apply design elements such as text, graphics, headlines, and white space;

(I) apply typography concepts, including font size and style;

(J) apply color theory;

(K) apply graphic design concepts such as contrast, alignment, repetition, and proximity;

(L) edit and evaluate products;

(M) develop technical documentation;

(N) demonstrate knowledge and appropriate use of hardware components, software programs, and storage devices;

(O) demonstrate knowledge of file and cross-platform compatibility; and

(P) deliver products in a variety of media.

Source: The provisions of this §130.95 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.96. Printing and Imaging Technology II (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisites: Printing and Imaging Technology I and Printing and Imaging Technology I Lab. Recommended corequisite: Printing and Imaging Technology II Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. In addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the printing industry with a focus on digital prepress and desktop digital publishing.

(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) identify appropriate training, education, or certification for employment;

(B) identify positive work behaviors and personal qualities needed to be employable; and

(C) identify skills related to seeking, applying for, and obtaining a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills.

(2) The student applies academic knowledge and skills in printing and imaging projects. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents such as brochures, programs, and newsletters; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) present information formally and informally;

(E) apply active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for printing and imaging projects.

(6) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations; and

(B) follow emergency procedures.

(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(8) The student applies ethical decision making and understands and complies with laws regarding use of technology in printing. The student is expected to:

(A) demonstrate an understanding of ethical conduct;

(B) understand copyright laws;

(C) model respect for intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies;

(E) understand Creative Commons laws, including all licensing; and

(F) analyze the impact of the printing industry on society.

(9) The student develops career-building characteristics. The student is expected to:

(A) understand the use and importance of a portfolio in documenting information such as work experiences, licenses, certifications, and work samples;

(B) demonstrate skills in evaluating and comparing employment opportunities; and

(C) examine employment opportunities in entrepreneurship.

(10) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student develops an advanced understanding of printing and imaging. The student is expected to:

(A) understand printing systems;

(B) explain how to manage the printing process;

(C) describe how to prepare customer materials for printing;

(D) understand a variety of printing processes;

(E) explain ink processes used for various types of printing, identify ink types, and describe how properties of ink affect coverage, color, and color separation;

(F) explain the uses of papers, including weights and finishes used for various types of printing;

(G) explain cleanup and maintenance of equipment;

(H) identify and use the principles of design to discuss, analyze, critique, and write about visual aspects in print design, including the student's own designs; and

(I) demonstrate knowledge of the principles of design in print design images with a focus on composition, color, design, shape, shadow, negative space, and background.

Source: The provisions of this §130.96 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.97. Printing and Imaging Technology II Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Corequisite: Printing and Imaging Technology II. This course must be taken concurrently with Printing and Imaging Technology II and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Printing and Imaging Technology II to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. In addition to developing advanced knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the printing industry with a focus on digital prepress and desktop digital publishing.

(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) participate in training, education, or certification for employment;

(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking, applying for, and obtaining a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills;

(2) The student applies academic knowledge and skills in printing and imaging projects. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) demonstrate active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals; and

(G) demonstrate public relations skills to increase internal and external customer/client satisfaction.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for printing and imaging projects.

(6) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations; and

(B) follow emergency procedures.

(7) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(8) The student applies ethical decision making and understands and complies with laws regarding use of technology in printing. The student is expected to:

(A) demonstrate an understanding of ethical conduct;

(B) apply copyright laws;

(C) model respect for intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies; and

(E) understand Creative Commons laws, including all licensing.

(9) The student develops career-building characteristics. The student is expected to:

(A) maintain and update a portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(B) demonstrate skills in evaluating and comparing employment opportunities.

(10) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student develops an advanced understanding of printing and imaging. The student is expected to:

(A) understand printing systems and their uses;

(B) demonstrate print process management;

(C) prepare customer materials for printing;

(D) demonstrate and apply a variety of printing processes;

(E) demonstrate industry standard ink processes used for various types of printing, identify ink types, and describe how properties of ink affect coverage, color, and color separation;

(F) demonstrate knowledge of papers, including weights and finishes used for various types of printing; and

(G) perform cleanup and maintenance of equipment.

Source: The provisions of this §130.97 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.98. Commercial Photography I (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 9-12. Recommended corequisite: Commercial Photography I Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in commercial photography require skills that span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs.

(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) identify and participate in training, education, or certification for employment;

(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable; and

(C) demonstrate skills related to finding and obtaining a desired job.

(2) The student applies academic knowledge and skills in commercial photography. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for commercial photography projects.

(6) The student understands commercial photography systems. The student is expected to analyze and summarize the history and evolution of commercial photography.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations in a photography studio and lab; and

(B) follow emergency procedures.

(8) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ communication skills;

(B) employ teamwork and conflict-management skills;

(C) conduct and participate in meetings; and

(D) employ mentoring skills.

(9) The student applies ethical decision making and understands and complies with laws regarding use of technology in commercial photography. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) discuss and apply copyright laws in relation to fair use and duplication of images;

(C) model respect for intellectual property when manipulating, morphing, and editing digital images;

(D) analyze the impact of photography on society; and

(E) understand Creative Commons laws, including all licensing.

(10) The student develops career-building characteristics. The student is expected to:

(A) create a portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(B) examine employment opportunities in entrepreneurship.

(11) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(12) The student develops a basic understanding of commercial photography. The student is expected to:

(A) research career opportunities and qualifications in photography;

(B) research the history and evolution of photography;

(C) analyze principles of commercial photography such as working with clients, interpreting client instructions, developing production schedules, and delivering products in a competitive market;

(D) analyze and apply the elements and principles of art to photographs;

(E) demonstrate knowledge of different types of cameras and lenses and their applications to photography;

(F) demonstrate knowledge of photographic composition and layout;

(G) demonstrate knowledge of different types of photographic media;

(H) demonstrate knowledge of the basics of digital photography;

(I) demonstrate knowledge of photographic lighting techniques, including three-point lighting;

(J) identify characteristics and uses of various types of photographic paper;

(K) demonstrate an understanding of standard conventions for mounting, matting, or framing;

(L) produce a variety of photographs using appropriate, current, industry-standard production processes;

(M) evaluate photographs using principles of art, commercial photography standards, and critical-thinking skills;

(N) understand resolution and digital file format;

(O) identify and use the principles of design to discuss, analyze, critique, and write about visual aspects in photographic work, including the student's own work; and

(P) demonstrate knowledge of the principles of design in photographic work with a focus on composition, color, design, shape, shadow, negative space, and background.

Source: The provisions of this §130.98 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.99. Commercial Photography I Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 9-12. Corequisite: Commercial Photography I. This course must be taken concurrently with Commercial Photography I and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Commercial Photography I to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in commercial photography require skills that span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the commercial photography industry with a focus on creating quality photographs.

(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) identify and participate in training, education, or certification for employment;

(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable; and

(C) demonstrate skills related to seeking employment to find and obtain a desired job.

(2) The student applies academic knowledge and skills in commercial photography. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for commercial photography projects.

(6) The student understands commercial photography systems. The student is expected to analyze and summarize the history and evolution of commercial photography.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations in a photography studio and lab; and

(B) follow emergency procedures.

(8) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ communication skills;

(B) employ teamwork and conflict-management skills;

(C) conduct and participate in meetings; and

(D) employ mentoring skills.

(9) The student applies ethical decision making and understands and complies with laws regarding use of technology in commercial photography. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) discuss and apply copyright laws in relation to fair use and duplication of images;

(C) model respect for intellectual property when manipulating, morphing, and editing digital images;

(D) analyze the impact of photography on society; and

(E) understand Creative Commons Laws, including all licensing.

(10) The student develops career-building characteristics. The student is expected to:

(A) create a portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(B) examine employment opportunities in entrepreneurship.

(11) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(12) The student demonstrates a basic understanding of commercial photography. The student is expected to:

(A) analyze principles of commercial photography such as working with clients, interpreting client instructions, developing production schedules, and delivering products in a competitive market;

(B) analyze and apply the elements and principles of art to photographs;

(C) demonstrate knowledge of different types of cameras and lenses and their applications to photography;

(D) demonstrate knowledge of photographic composition and layout;

(E) demonstrate knowledge of the characteristics of different types of photographic media;

(F) demonstrate knowledge of the basics of digital photography;

(G) demonstrate knowledge of photographic lighting techniques, including three-point lighting;

(H) identify characteristics and uses of various types of photographic paper;

(I) demonstrate an understanding of standard conventions for mounting, matting, or framing;

(J) produce a variety of photographs using appropriate, current, industry-standard production processes;

(K) evaluate photographs using principles of art, commercial photography standards, and critical-thinking skills; and

(L) demonstrate an understanding of resolutions and digital file format.

Source: The provisions of this §130.99 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.100. Commercial Photography II (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisites: Commercial Photography I and Commercial Photography I Lab. Recommended corequisite: Commercial Photography II Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in commercial photography span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the commercial photography industry with a focus on producing, promoting, and presenting professional quality photographs.

(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) participate in training, education, or certification for employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable; and

(C) demonstrate skills related to seeking, applying for, and obtaining a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills.

(2) The student applies academic knowledge and skills in commercial photography. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for commercial photography projects.

(6) The student applies knowledge of commercial photography systems. The student is expected to analyze and summarize the history and evolution of the commercial photography field.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations in a photography studio and lab; and

(B) follow emergency procedures.

(8) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders with organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(9) The student applies ethical decision making and complies with laws regarding use of technology in commercial photography. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) discuss and apply copyright laws in relation to fair use and duplication of images;

(C) model respect for intellectual property when manipulating, morphing, and editing digital images; and

(D) demonstrate proper etiquette and knowledge of acceptable use policies, including Creative Common laws and licensing.

(10) The student develops career-building characteristics. The student is expected to:

(A) maintain and update a portfolio with information such as work experiences, licenses, certifications, and work samples; and

(B) demonstrate skills in evaluating and comparing employment opportunities.

(11) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks such as creating quotes and budgeting.

(12) The student develops an increased understanding of commercial photography. The student is expected to:

(A) identify photographs for commercial photography;

(B) recognize the elements and principles of art as they apply to a variety of commercial photography projects;

(C) use principles of commercial photography such as working with clients, interpreting client instructions, developing production schedules, and delivering products in a competitive market;

(D) identify appropriate cameras and lenses;

(E) recognize appropriate photographic composition and layout principles;

(F) identify the use of appropriate digital black and white and color photography;

(G) understand the use of effective photographic lighting techniques, including three-point, studio, portraiture, and product;

(H) recognize the elements of professional quality photographs;

(I) identify the most appropriate types of photographic paper for projects;

(J) recognize appropriate solutions for mounting, matting, or framing photographs;

(K) understand appropriate, current, and industry-standard production processes to produce photographs;

(L) evaluate photographs using principles of art, commercial photography standards, and critical-thinking skills;

(M) identify appropriate resolution and digital file formats;

(N) identify and use the principles of design to discuss, analyze, critique, and write about visual aspects of photographic work, including the student's own work; and

(O) demonstrate knowledge of the principles of design in photographic work with a focus on composition, color, design, shape, shadow, negative space, and background.

Source: The provisions of this §130.100 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.101. Commercial Photography II Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisites: Commercial Photography I and Commercial Photography I Lab. Corequisite: Commercial Photography II. This course must be taken concurrently with Commercial Photography II and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Commercial Photography II to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in commercial photography span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the commercial photography industry with a focus on producing, promoting, and presenting professional quality photographs.

(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) participate in training, education, or certification for employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable; and

(C) demonstrate skills related to seeking, applying for, and obtaining a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills.

(2) The student applies academic knowledge and skills in commercial photography. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for commercial photography projects.

(6) The student applies knowledge of commercial photography systems. The student is expected to analyze and summarize the history and evolution of the commercial photography field.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations in a photography studio and lab; and

(B) follow emergency procedures.

(8) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders with organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(9) The student applies ethical decision making and complies with laws regarding use of technology in commercial photography. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) discuss and apply copyright laws in relation to fair use and duplication of images;

(C) model respect for intellectual property when manipulating, morphing, and editing digital images; and

(D) demonstrate proper etiquette and knowledge of acceptable use policies, including Creative Common laws and licensing.

(10) The student develops career-building characteristics. The student is expected to:

(A) maintain and update a portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(B) demonstrate skills in evaluating and comparing employment opportunities.

(11) The student applies technical skills for efficiency. The student is expected to:

(A) employ planning and time-management skills to complete work tasks such as creating quotes and budgeting; and

(B) demonstrate skills in budgeting and creating quotes for freelance or contract projects.

(12) The student develops an increased understanding of commercial photography. The student is expected to:

(A) create photographs for defined purposes;

(B) apply the elements and principles of art to a variety of commercial photography projects;

(C) demonstrate the principles of commercial photography such as working with clients, interpreting client instructions, developing production schedules, and delivering products in a competitive market;

(D) demonstrate the use of appropriate cameras and lenses;

(E) apply appropriate photographic composition and layout principles;

(F) demonstrate appropriate digital black and white and color photography;

(G) apply effective photographic lighting techniques, including three point, studio, portraiture, and product;

(H) produce professional quality photographs;

(I) use the most appropriate types of photographic paper for projects;

(J) use the most appropriate solutions for mounting, matting, or framing photographs;

(K) demonstrate use of appropriate, current, and industry-standard production processes to produce photographs;

(L) evaluate photographs using principles of art, commercial photography standards, and critical-thinking skills; and

(M) demonstrate use of appropriate resolution and digital file formats.

Source: The provisions of this §130.101 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.102. Fashion Design I (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Arts, Audio/Video Technology, and Communications. Recommended corequisite: Fashion Design I Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the fashion industry with an emphasis on design and construction.

(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) identify training, education, or certification for employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment;

(D) create a career portfolio to document work samples; and

(E) examine employment opportunities in entrepreneurship.

(2) The student applies academic knowledge and skills in fashion, textile, and apparel projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) communicate with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, and industry programs for fashion, textiles, and apparel projects.

(6) The student understands fashion, textile, and apparel systems. The student is expected to:

(A) analyze the history of the fashion, textiles, and apparel field; and

(B) compare fashion history relative to current fashions trends.

(7) The student applies safety regulations. The student is expected to implement personal and workplace safety rules and procedures.

(8) The student applies leadership characteristics in classroom and professional settings. The student is expected to:

(A) employ leadership skills;

(B) apply characteristics of effective working relationships;

(C) participate in groups; and

(D) employ mentoring skills.

(9) The student applies ethical decision making with laws regarding use of technology in fashion, textiles, and apparel. The student is expected to:

(A) exhibit ethical conduct such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) identify and apply copyright laws; and

(C) analyze fashion industry influences on society.

(10) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student analyzes the nature of fashion. The student is expected to:

(A) explain the value of fashion;

(B) identify the spectrum of the fashion industry;

(C) identify prominent fashion publications;

(D) evaluate the fashion cycle; and

(E) use appropriate terminology.

(12) The student evaluates factors influencing the apparel industry. The student is expected to:

(A) describe the interrelationship of the U.S. and international economies;

(B) identify and discuss labor laws of the United States and other countries;

(C) recognize procedures within the apparel industry that protect the environment; and

(D) describe technological advancements influencing the apparel industry.

(13) The student analyzes factors that impact consumer purchasing of fashion and apparel accessories. The student is expected to:

(A) describe social, cultural, and life cycle influences;

(B) explain how fashion trends are determined;

(C) analyze the influence of advertising on consumer apparel choices; and

(D) determine apparel management techniques for individuals with special needs.

(14) The student selects proper care and maintenance practices for apparel. The student is expected to:

(A) interpret labeling information to determine care procedures for apparel products;

(B) evaluate clothing care products and equipment;

(C) determine proper equipment and services related to care, maintenance, and storage of apparel;

(D) identify proper safety procedures when using care products and equipment; and

(E) analyze the impact of clothing care requirements on clothing selection and the clothing budget.

(15) The student applies skills related to commercial care of clothing. The student is expected to:

(A) identify procedures to receive, mark, and identify laundry or dry cleaning;

(B) identify appropriate laundry and dry cleaning procedures;

(C) identify safety and sanitation procedures while laundering, pressing, or dry cleaning;

(D) describe commercial laundry or dry cleaning techniques; and

(E) identify pressing procedures.

(16) The student proposes ways to effectively manage the apparel dollar. The student is expected to:

(A) develop a budget for apparel and accessory costs, care, and maintenance;

(B) compare various sources for apparel and accessory purchases;

(C) analyze the impact of technology on consumer apparel purchasing options; and

(D) develop and implement ideas for recycling apparel.

(17) The student designs apparel products using principles of effective design. The student is expected to:

(A) identify basic body types;

(B) identify and apply proportion, balance, emphasis, rhythm, and harmony for specific fashion ensembles;

(C) determine clothing silhouettes, fabric selection, and design elements appropriate for specific body types;

(D) use design principles to design products for the human form, including adaptations for individuals with special needs;

(E) sketch fashion drawings using basic design tools and techniques such as fashion drawing, draping, and flat pattern methods for fitting a garment; and

(F) apply technology applications useful in the apparel design process.

(18) The student designs apparel products using elements of effective design. The student is expected to:

(A) identify and apply shape, line, form, color, and texture for specific fashion ensembles;

(B) determine clothing silhouettes, fabric selection, and design elements appropriate for specific body types; and

(C) use design elements to design products for the human form, including adaptations for individuals with special needs.

Source: The provisions of this §130.102 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.103. Fashion Design I Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Arts, Audio/Video Technology, and Communications. Corequisite: Fashion Design I. This class must be taken concurrently with Fashion Design I and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Fashion Design I to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the fashion industry with an emphasis on design and construction.

(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) participate in training, education, or certification for employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment; and

(D) create a career portfolio to document work samples.

(2) The student applies academic knowledge and skills in fashion, textile, and apparel projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) communicate with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, and industry programs for fashion, textiles, and apparel projects.

(6) The student analyzes the history of the fashion, textiles, and apparel field. The student is expected to:

(A) compare fashion history relative to current fashions trends; and

(B) evaluate how historical events and attitudes influence fashion trends.

(7) The student applies safety regulations. The student is expected to implement personal and workplace safety rules and procedures.

(8) The student applies leadership characteristics in classroom and professional settings. The student is expected to:

(A) employ leadership skills;

(B) apply characteristics of effective working relationships;

(C) participate in groups; and

(D) employ mentoring skills.

(9) The student applies ethical decision making with laws regarding use of technology in fashion, textiles, and apparel. The student is expected to:

(A) exhibit ethical conduct such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) apply copyright laws; and

(C) evaluate fashion industry influences on society.

(10) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student analyzes the nature of fashion. The student is expected to:

(A) analyze prominent fashion publications; and

(B) analyze trends using the fashion cycle.

(12) The student analyzes fiber and textile characteristics. The student is expected to:

(A) identify fibers and textiles;

(B) evaluate water resistance, heat sensitivity, and colorfastness of various textiles;

(C) evaluate textile products as to suitability for varied apparel uses; and

(D) distinguish textile selvage and grain line.

(13) The student selects proper care and maintenance practices for apparel. The student is expected to:

(A) use appropriate care procedures for textile products; and

(B) use appropriate care procedures for apparel products.

(14) The student applies skills related to commercial care of clothing. The student is expected to:

(A) demonstrate safety and sanitary procedures while laundering, pressing, or dry cleaning; and

(B) demonstrate pressing procedures.

(15) The student analyzes the apparel production process from design concept to finished product. The student is expected to:

(A) identify and describe equipment needed for the apparel production process; and

(B) outline the apparel construction process.

(16) The student applies knowledge of fibers, fabrics, and design when evaluating and designing textile products. The student is expected to:

(A) identify characteristics and properties of natural and manufactured fibers;

(B) describe methods of textile production; and

(C) assess the effects of various environmental conditions on textiles.

(17) The student demonstrates effective repair and alteration techniques. The student is expected to:

(A) use appropriate measurement tools and measurement units;

(B) demonstrate appropriate use, selection, and care of equipment, tools, and notions;

(C) apply design principles and elements when altering apparel;

(D) apply safety procedures while operating equipment; and

(E) determine apparel design and alterations to accommodate individuals with special needs.

(18) The student demonstrates effective construction techniques. The student is expected to:

(A) apply principles of quality apparel construction;

(B) apply design principles and elements when designing and constructing apparel;

(C) apply appropriate construction and pressing techniques in apparel and textile construction; and

(D) describe pattern parts and terminology.

Source: The provisions of this §130.103 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.104. Fashion Design II (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Fashion Design I. Recommended corequisite: Fashion Design II Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the fashion industry with an emphasis on design and construction.

(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) identify and participate in training, education, or certification for employment;

(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment to find and obtain a desired job;

(D) create a career portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(E) examine employment opportunities in entrepreneurship.

(2) The student applies academic knowledge and skills in fashion, textile, and apparel projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) communicate with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, and industry programs for fashion, textiles, and apparel projects.

(6) The student analyzes the history of the fashion, textiles, and apparel field. The student is expected to analyze fashion history relative to current fashions trends.

(7) The student applies safety regulations. The student is expected to implement personal and workplace safety rules and procedures.

(8) The student applies leadership characteristics in classroom and professional settings. The student is expected to:

(A) employ leadership skills to accomplish collective goals;

(B) establish and maintain practices for effective working relationships such as providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(C) conduct and participate in meetings using parliamentary procedure; and

(D) employ mentoring skills to inspire others.

(9) The student demonstrates ethical decision making and complies with legal practices pertaining to fashion, textiles, and apparel. The student is expected to:

(A) exhibit ethical conduct as defined by the fashion and apparel industries;

(B) apply copyright laws;

(C) model respect for intellectual property;

(D) demonstrate knowledge of acceptable use policies;

(E) summarize the rights and responsibilities of employers and employees; and

(F) analyze legal aspects of the fashion and apparel industries.

(10) The student applies advanced technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student describes how garment development and fashion have evolved from ancient times to present day. The student is expected to:

(A) evaluate significant historic fashions from early civilizations to today;

(B) describe social influences that have affected fashion;

(C) explain values communicated through clothing in specific historical periods;

(D) show the influence of historic fashions on current-year fashion; and

(E) identify prominent historical designers.

(12) The student analyzes various types of worldwide fashion production. The student is expected to:

(A) describe mass production techniques; and

(B) describe the development of haute couture.

(13) The student determines design influences on the fashion industry. The student is expected to:

(A) explain the role of leading designers in determining fashion trends;

(B) analyze international factors affecting fashion design;

(C) determine the impact of technology on the design industry; and

(D) determine the impact of design decisions on product cost.

(14) The student creates a portfolio of fashion designs. The student is expected to:

(A) demonstrate fashion figure drawing;

(B) apply design elements and principles to create fashion drawings;

(C) demonstrate the properties and characteristics of color;

(D) use computer-aided techniques to create fashion designs;

(E) select appropriate textiles to use in specific designs; and

(F) assemble portfolio components to present fashion designs.

(15) The student demonstrates basic techniques in personal fashion image analysis. The student is expected to:

(A) describe techniques used to analyze the fashion image of individual clients;

(B) analyze factors involved in fashion image consulting such as personal coloring, color harmonies, appropriate fabric textures, body proportion and silhouette, figure, facial and hair analysis, and wardrobe coordination; and

(C) develop a personal fashion image evaluation for an individual.

Source: The provisions of this §130.104 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.105. Fashion Design II Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisite: Fashion Design I. Corequisite: Fashion Design II. This course must be taken concurrently with Fashion Design II and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Fashion Design II to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the fashion industry with an emphasis on design and construction.

(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) identify and participate in training, education, or certification for employment;

(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment to find and obtain a desired job;

(D) create a career portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(E) examine employment opportunities in entrepreneurship.

(2) The student applies academic knowledge and skills in fashion, textile, and apparel projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) communicate with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, word processors, industry programs, slide show presentation, and spreadsheet applications for fashion, textiles, and apparel projects.

(6) The student understands fashion, textile, and apparel systems. The student is expected to analyze and summarize the history and evolution of the fashion, textiles, and apparel field.

(7) The student applies safety regulations. The student is expected to implement personal and workplace safety rules and procedures.

(8) The student applies leadership characteristics in classroom and professional settings. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(C) conduct and participate in meetings using parliamentary procedure; and

(D) employ mentoring skills to inspire and teach others.

(9) The student demonstrates ethical decision making and complies with legal practices pertaining to fashion, textiles, and apparel. The student is expected to:

(A) exhibit ethical conduct;

(B) apply copyright laws;

(C) model respect for intellectual property;

(D) demonstrate knowledge of acceptable use policies;

(E) summarize the rights and responsibilities of employers and employees;

(F) exhibit ethical practices as defined by the fashion and apparel industries; and

(G) analyze legal aspects of the fashion and apparel industries.

(10) The student applies advanced technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student performs operations for various roles in the fashion industry. The student is expected to:

(A) identify tasks that employees may perform;

(B) follow procedures identified for performing tasks; and

(C) apply resource management procedures when completing assigned tasks.

(12) The student determines textile suitability for specific applications and uses. The student is expected to:

(A) compare processes for dyeing, printing, and finishing used in the textile industry;

(B) explain how finishes affect the characteristics of fabrics; and

(C) recommend care procedures for various textile products.

(13) The student determines implications of textile characteristics on apparel and fashion. The student is expected to:

(A) outline the textile design process from concept to finished product;

(B) differentiate types and methods of textile production;

(C) summarize implications and methods of dyeing, printing, and finishing of textiles;

(D) determine textile and apparel labeling requirements; and

(E) determine factors affecting the cost of textile products.

(14) The student creates a portfolio of fashion designs. The student is expected to:

(A) demonstrate fashion figure drawing;

(B) apply design elements and principles to create fashion drawings;

(C) use computer-aided techniques to create fashion designs;

(D) select appropriate textiles to use in specific designs; and

(E) assemble portfolio components to present fashion designs.

(15) The student produces quality fashion products. The student is expected to:

(A) outline general procedures and equipment used in apparel design and pattern development;

(B) construct custom made garments using appropriate tools, equipment, and supplies;

(C) develop garments for proper fit;

(D) apply correct procedures used in garment fitting, pattern making, and pattern alterations;

(E) construct custom made garments; and

(F) demonstrate safety practices related to garment construction.

(16) The student demonstrates basic techniques in personal fashion image analysis. The student is expected to:

(A) describe techniques used to analyze the fashion image of individual clients;

(B) analyze factors involved in fashion image consulting such as personal coloring, color harmonies, appropriate fabric textures, body proportion and silhouette, figure, facial and hair analysis, and wardrobe coordination; and

(C) develop a personal fashion image evaluation for an individual.

Source: The provisions of this §130.105 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.106. Graphic Design and Illustration I (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Arts, Audio/Video Technology, and Communications. Recommended corequisite: Graphic Design and Illustration I Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster is focused on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design.

(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) identify and participate in training, education, or certification for employment;

(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking employment to find and obtain a desired job;

(D) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(E) examine employment opportunities in entrepreneurship.

(2) The student applies academic knowledge and skills in art and design projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student understands professional communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and employs problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, and presentation applications for art and design projects.

(6) The student understands design systems. The student is expected to analyze and summarize the history and evolution of related fields.

(7) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(8) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills;

(B) employ teamwork and conflict-management skills;

(C) conduct and participate in meetings; and

(D) employ mentoring skills.

(9) The student applies ethical decision making and understands and complies with laws regarding use of technology in graphic design and illustration. The student is expected to:

(A) exhibit ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) discuss and apply copyright laws in relation to fair use and acquisition;

(C) model respect for intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies; and

(E) analyze the impact of the advertising and visual communication design industry on society.

(10) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student develops an increasing understanding of graphic design and illustration. The student is expected to research art and design career opportunities and qualifications.

(12) The student researches the history and evolution of art and design. The student is expected to:

(A) explain the history of visual arts and design;

(B) understand general characteristics in artwork from a variety of cultures; and

(C) compare current visual arts technologies with historical technologies.

(13) The student conducts oral or written critiques of designs. The student is expected to:

(A) interpret, evaluate, and justify design decisions;

(B) apply a critical method of evaluation;

(C) communicate an oral or written defense; and

(D) evaluate oral or written feedback.

(14) The student demonstrates an understanding of artistic design. The student is expected to analyze and apply art elements and principles in photographic works, multimedia applications, and digital and print media.

(15) The student employs a creative design process to create original two- or three-dimensional projects. The student is expected to:

(A) create designs for defined applications;

(B) apply elements of design;

(C) apply design principles and typography;

(D) use good composition;

(E) demonstrate anatomical figure drawing;

(F) demonstrate drawing in one-point, two-point, and multi-point perspective;

(G) create a project by applying color; and

(H) apply printing concepts.

Source: The provisions of this §130.106 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.107. Graphic Design and Illustration I Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Recommended prerequisite: Principles of Arts, Audio/Video Technology, and Communications. Corequisite: Graphic Design and Illustration I. This class must be taken concurrently with Graphic Design and Illustration I and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Graphic Design and Illustration I to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster is focused on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an understanding of the industry with a focus on fundamental elements and principles of visual art and design.

(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) identify and participate in training, education, or certification for employment;

(B) identify and demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking employment to find and obtain a desired job;

(D) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(E) examine employment opportunities in entrepreneurship.

(2) The student applies academic knowledge and skills in art and design projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student understands professional communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student understands and employs problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing and presentation applications for art and design projects.

(6) The student understands design systems. The student is expected to analyze and summarize the history and evolution of related fields.

(7) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(8) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills;

(B) employ teamwork and conflict-management skills;

(C) conduct and participate in meetings; and

(D) employ mentoring skills.

(9) The student applies ethical decision making and understands and complies with laws regarding use of technology in graphic design and illustration. The student is expected to:

(A) exhibit ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) apply copyright laws in relation to fair use and acquisition;

(C) model respect for intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies; and

(E) analyze the impact of the advertising and visual communication design industry on society.

(10) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student develops an increasing understanding of graphic design and illustration. The student is expected to research art and design career opportunities and qualifications.

(12) The student researches the history and evolution of art and design. The student is expected to:

(A) explain the history of visual arts and design;

(B) understand general characteristics in artwork from a variety of cultures; and

(C) compare current visual arts technologies with historical technologies.

(13) The student conducts oral or written critiques of designs. The student is expected to:

(A) interpret, evaluate, and justify design decisions;

(B) apply a critical method of evaluation;

(C) communicate an oral or written defense; and

(D) evaluate oral or written feedback.

(14) The student demonstrates an understanding of artistic design. The student is expected to analyze and apply art elements and principles in photographic works, multimedia applications, and digital and print media.

(15) The student employs a creative design process to create original two- or three-dimensional projects. The student is expected to:

(A) create designs for defined applications;

(B) apply elements of design;

(C) apply design principles and typography;

(D) use good composition;

(E) demonstrate anatomical figure drawing;

(F) demonstrate drawing in one-point, two-point, and multi-point perspective;

(G) create a project by applying color; and

(H) apply printing concepts.

Source: The provisions of this §130.107 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.108. Graphic Design and Illustration II (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Graphic Design and Illustration I. Recommended corequisite: Graphic Design and Illustration II Lab. 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 Arts, Audio/Video Technology, and Communications Career Cluster is focused on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and 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 as required by business and industry. The student is expected to:

(A) participate in training, education, or certification for employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment to find and obtain a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills;

(D) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(E) demonstrate skills in evaluating and comparing employment opportunities.

(2) The student applies academic knowledge and skills in art and design projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student understands and employs problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(4) The student applies knowledge of design systems. The student is expected to analyze and summarize the history and evolution of related fields.

(5) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(6) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills;

(B) employ teamwork and conflict-management skills;

(C) conduct and participate in meetings; and

(D) employ mentoring skills.

(7) The student applies ethical decision making and complies with laws regarding use of technology in art and design. The student is expected to:

(A) exhibit ethical conduct;

(B) apply copyright laws;

(C) model respect for intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies; and

(E) identify the impact of the advertising and visual communication design industry on society.

(8) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(9) The student develops an advanced understanding of graphic design and illustration. The student is expected to:

(A) interpret, evaluate, and justify design decisions;

(B) participate in oral or written critiques of designs by applying a critical method of evaluation; and

(C) identify and apply art elements and principles to designs and illustrations.

Source: The provisions of this §130.108 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.109. Graphic Design and Illustration II Lab (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisite: Graphic Design and Illustration I. Corequisite: Graphic Design and Illustration II. This course must be taken concurrently with Graphic Design and Illustration II and may not be taken as a stand-alone course. Districts are encouraged to offer this lab in a consecutive block with Graphic Design and Illustration II to allow students sufficient time to master the content of both courses. 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 Arts, Audio/Video Technology, and Communications Career Cluster is focused on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in graphic design and illustration span all aspects of the advertising and visual communications industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced understanding of the industry with a focus on mastery of content knowledge and 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 as required by business and industry. The student is expected to:

(A) participate in training, education, or certification for employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable;

(C) demonstrate skills related to seeking and applying for employment to find and obtain a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills;

(D) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(E) demonstrate skills in evaluating and comparing employment opportunities.

(2) The student applies academic knowledge and skills in art and design projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student demonstrates professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information;

(D) deliver formal and informal presentations;

(E) demonstrate active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills.

(4) The student applies technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, and presentation applications for art and graphic design projects.

(5) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(6) The student demonstrates ethical decision making and complies with laws regarding use of technology in art and design. The student is expected to:

(A) exhibit ethical conduct;

(B) apply copyright laws;

(C) model respect for intellectual property; and

(D) demonstrate proper etiquette and knowledge of acceptable use policies.

(7) The student applies technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(8) The student develops an advanced understanding of graphic design and illustration. The student is expected to interpret, evaluate, and justify design decisions.

(9) The student participates in oral or written critiques of designs. The student is expected to:

(A) apply a critical method of evaluation;

(B) communicate an oral or written defense; and

(C) identify and demonstrate art elements and principles in designs and illustrations.

(10) The student employs a creative design process to create original two- or three-dimensional projects. The student is expected to:

(A) create designs for defined applications;

(B) demonstrate elements of design;

(C) demonstrate design principles and typography;

(D) use appropriate composition;

(E) use anatomically appropriate figure drawing;

(F) use appropriate perspective;

(G) use the most effective color choices in projects; and

(H) use printing concepts.

Source: The provisions of this §130.109 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.110. Professional Communications (One-Half Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 9-12. This course satisfies a speech credit or skills graduation requirement. 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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

(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) explore opportunities in training, education, and certifications for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment;

(D) create a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples; and

(E) demonstrate skills in evaluating and comparing employment opportunities.

(2) The student applies English language arts in professional communications projects. The student is expected to:

(A) demonstrate use of content, technical concepts, and vocabulary;

(B) use correct grammar, punctuation, and terminology to write and edit documents;

(C) identify assumptions, purpose, outcomes, solutions, and propaganda techniques;

(D) compose and edit copy for a variety of written documents;

(E) evaluate oral and written information; and

(F) research topics for the preparation of oral and written communications.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) develop and interpret tables, charts, and figures;

(G) listen to and speak with diverse individuals; and

(H) exhibit public relations skills.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student uses technology applications and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for audio and video production projects; and

(B) use processes such as personal information management, file management, and file sharing.

(6) The student understands communications systems. The student is expected to:

(A) describe the nature and types of businesses;

(B) analyze and summarize the history and evolution of the various related fields of study; and

(C) analyze the economic base in order to demonstrate an understanding of the economic factors influencing the industry as a whole.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and classroom safety rules and regulations; and

(B) follow emergency procedures as needed.

(8) The student identifies and develops leadership characteristics. The student is expected to:

(A) identify leadership characteristics; and

(B) participate in student leadership and professional development activities.

(9) The student applies ethical decision making and understands and complies with laws regarding use of technology in communications. The student is expected to:

(A) exhibit ethical conduct;

(B) discuss copyright laws in relation to fair use and duplication of materials;

(C) analyze the impact of communications on society; and

(D) understand and exhibit digital citizenship.

(10) The student applies technical skills for efficiency. The student is expected to:

(A) employ planning and time-management skills to relate to professional communications; and

(B) use technology to enhance productivity.

(11) The student develops an understanding of professional communications through exploration of the Arts, Audio/Video Technology, and Communications Career Cluster. The student is expected to:

(A) develop an understanding of the evolution of the arts, audio/video technology, and communications career field, including the history, foundation elements, principles, and communicative effects;

(B) demonstrate knowledge of the communication process, including the characteristics of oral language, types and effects of nonverbal communication, effective nonverbal strategies such as a firm handshake, direct eye contact, and appropriate use of space and distance;

(C) demonstrate knowledge of the components of the listening process and specific kinds of listening such as critical, deliberative, and empathetic;

(D) identify and analyze ethical and social responsibilities of communicators;

(E) demonstrate knowledge of various communication processes in professional contexts, including using effective communication skills; analyzing standards for appropriate use of informal, standard, and technical language; making appropriate and important communication decisions based on accurate and complete information; and recognizing and analyzing appropriate channels of communication in organizations;

(F) use appropriate interpersonal communication strategies in professional contexts, including using different types of professional communication and communication management skills and observing professional etiquette;

(G) demonstrate knowledge of the interview process, including effective communication as interviewee and interviewer, and federal employment laws regarding interviews;

(H) identify and use appropriate strategies for communicating with a variety of audiences;

(I) identify the types, purposes, dynamics, processes, effectiveness, roles of members, and leadership styles of professional groups;

(J) communicate effectively in group contexts by assuming productive roles, solving problems, managing conflicts, and building consensus in groups;

(K) research formal and informal professional presentations by analyzing the audience, occasion, purpose, and primary and secondary sources; determining specific topics for presentations; and evaluating sources using media literacy strategies such as recognizing bias, misinformation, untruths, and source credibility;

(L) develop formal and informal professional presentations using effective strategies to organize presentations, using information to support points in presentations, preparing scripts or notes, using visual or auditory aids to enhance presentations, and providing credit for information sources;

(M) conduct formal and informal professional presentations using effective verbal and nonverbal strategies to inform, persuade, or motivate an audience;

(N) use appropriate techniques to manage communication apprehension and build self-confidence;

(O) evaluate formal and informal professional presentations by participating in question-and-answer sessions following presentations, applying critical-listening strategies, and evaluating the effectiveness of presentations, including self-evaluation;

(P) participate in an informative or persuasive group discussion;

(Q) use a variety of strategies to acquire information from electronic resources;

(R) acquire electronic information in a variety of formats;

(S) use research skills and electronic communications;

(T) format digital information for appropriate and effective communication in a product by defining the purpose, identifying the intended audience, and using the principles of page design such as leading, kerning, automatic text flow into linked columns, widows, orphans, and text wrap;

(U) apply desktop publishing to create products using word processing programs, editing products, or drawing programs; design elements such as text, graphics, headlines, color, white space; typography concepts, including font size and style; and graphic design concepts such as contrast, alignment, repetition, and proximity;

(V) develop and reference technical documentation; and

(W) deliver digital products in a variety of appropriate media.

Source: The provisions of this §130.110 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.111. Practicum in Animation (Two Credits), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Animation II and Animation II Lab. 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in animation span all aspects of the arts, audio/video technology, and communications industry. Building upon the concepts taught in Animation II and its corequisite Animation II Lab, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production animation products in a professional environment. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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) participate in training, education, or certification for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment; and

(D) create a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples.

(2) The student applies academic knowledge and skills in production projects. The student is expected to:

(A) apply English language arts knowledge and skills by consistently demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of written documents such as scripts, captions, schedules, reports, manuals, proposals, and other client-based documents; and

(B) apply mathematics knowledge and skills in invoicing and time-based mathematics by consistently demonstrating knowledge of arithmetic operations and applying measurement to solve problems.

(3) The student implements advanced professional communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) formulate, analyze, and organize oral and written information;

(C) formulate, analyze, interpret, and communicate information, data, and observations;

(D) create and deliver formal and informal presentations;

(E) apply active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student implements advanced problem-solving methods. The student is expected to:

(A) employ critical-thinking skills, including data gathering and interpretation independently and in groups; and

(B) employ interpersonal skills in groups to solve problems and make decisions.

(5) The student implements advanced technology applications and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for animation projects; and

(B) use processes such as personal information management, file management, and file sharing.

(6) The student implements advanced knowledge of the evolution and current trends of the animation industry. The student is expected to:

(A) summarize the history and evolution of the animation industry; and

(B) analyze the current trends of the animation industry.

(7) The student applies safety regulations. The student is expected to:

(A) consistently implement personal and workplace safety rules and regulations;

(B) recognize and resolve potential safety concerns; and

(C) follow emergency procedures.

(8) The student applies leadership characteristics to student organizations and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(9) The student implements ethical decision making and complies with laws regarding use of technology. The student is expected to:

(A) exhibit ethical conduct related to providing proper credit for ideas and privacy of sensitive content;

(B) discuss and apply copyright laws in relation to fair use and acquisition, trademark laws, and personal privacy laws and use digital information citing sources using established methods;

(C) model respect for intellectual property when manipulating, morphing, and editing graphics, video, text, and sound;

(D) demonstrate proper etiquette and knowledge of acceptable use policies when using networks, especially resources on the Internet and intranet; and

(E) analyze the impact of the animation industry on society.

(10) The student demonstrates appropriate career-building characteristics and maintains a professional portfolio. The student is expected to:

(A) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(B) demonstrate skills in evaluating and comparing employment opportunities;

(C) examine and employ professional networking opportunities such as career and technical student organizations, professional social media, and industry professional organizations; and

(D) examine employment opportunities in entrepreneurship.

(11) The student employs effective planning and time-management skills to enhance productivity. The student is expected to:

(A) employ effective planning and time-management skills to complete work tasks; and

(B) use technology to enhance productivity.

(12) The student implements an advanced understanding of a client-based production in all stages of production. The student is expected to:

(A) determine and meet client needs by conducting client meetings to identify specific project requirements and target demographics; and

(B) develop a production proposal for client approval that includes a production schedule, research-based production costs, and appropriate delivery and distribution options.

(13) The student engages in pre-production activities for a successful execution of the project. The student is expected to:

(A) identify cast, crew, equipment, and location requirements;

(B) develop a budget with considerations for cast, crew, equipment, and location;

(C) analyze the script and storyboard processes; and

(D) assign team roles required for production.

(14) The student engages in production activities for successful execution of the project. The student is expected to:

(A) conduct a client meeting for presenting production strategies and implement client feedback;

(B) implement a coherent sequence of production events;

(C) use necessary equipment and crew for quality productions;

(D) demonstrate teamwork and knowledge of interpersonal skills with sensitivity to diversity;

(E) demonstrate appropriate use of editing systems; and

(F) make decisions appropriate for each element of production.

(15) The student engages in post-production activities for a successful output and distribution of the project. The student is expected to:

(A) make necessary adjustments regarding compatibility issues, including digital file formats and cross-platform connectivity;

(B) use various compression standards;

(C) research the appropriate delivery formats for the target audience;

(D) advise clients on optimal delivery options; and

(E) discuss distribution options with optimal project reach.

(16) The student practices business skills for freelance entrepreneurs. The student is expected to:

(A) implement standard freelance entrepreneur self-promotion techniques;

(B) develop proposals and standard billing and collection practices;

(C) research freelance entrepreneur start-up practices; and

(D) use technology applications common to freelance entrepreneurs.

(17) The student develops an understanding of professional employment strategies through practical experience in the arts, audio/video technology, and communications career field. The student is expected to:

(A) identify types and requirements of potential employers;

(B) use professional etiquette and protocol in situations such as making introductions, speaking on the phone, communicating via electronic devices, offering and receiving criticism, and making follow-up communications; and

(C) exhibit appropriate grooming and attire.

(18) The student develops an understanding of appropriate interview strategies in professional contexts. The student is expected to:

(A) employ appropriate verbal, nonverbal, and listening skills;

(B) use clear and appropriate communications to convey skill set to others;

(C) understand and apply federal laws regarding lawful employment interviews; and

(D) identify and use appropriate strategies for dealing with diverse individuals.

Source: The provisions of this §130.111 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.112. Practicum in Audio/Video Production (Two Credits), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 11 and 12. Prerequisites: Audio/Video Production II and Audio/Video Production II Lab. 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in audio/video production span all aspects of the audio/video communications industry. Building upon the concepts taught in Audio/Video Production II and its corequisite Audio/Video Production II Lab, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production audio and video products in a professional environment. This course may be implemented in an advanced audio/video or audio format. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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) participate in training, education, or certification for employment;

(B) demonstrate professional standards and personal qualities needed to be employable such as oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability;

(C) demonstrate skills related to seeking and applying for employment; and

(D) create a resume and cover letter/letter of interest to document information such as work experiences, licenses, certifications, and work samples.

(2) The student applies academic knowledge and skills in production projects. The student is expected to:

(A) apply English language arts knowledge and skills by consistently demonstrating use of content, technical concepts, and vocabulary; using correct grammar, punctuation, and terminology to write and edit documents; and composing and editing copy for a variety of written documents such as scripts, captions, schedules, reports, manuals, proposals, and other client-based documents; and

(B) apply mathematics knowledge and skills in invoicing and time-based mathematics by consistently demonstrating knowledge of arithmetic operations and applying measurement to solve problems.

(3) The student implements advanced professional communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) formulate, analyze, and organize oral and written information;

(C) formulate, analyze, interpret, and communicate information, data, and observations;

(D) create and deliver formal and informal presentations;

(E) apply active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student implements advanced problem-solving methods. The student is expected to:

(A) employ critical-thinking skills, including data gathering and interpretation independently and in groups; and

(B) employ interpersonal skills in groups to solve problems and make decisions.

(5) The student implements advanced technology applications and processes. The student is expected to:

(A) use technology applications such as social media, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for audio and video production projects; and

(B) use processes such as personal information management, file management, and file sharing.

(6) The student implements advanced knowledge of the evolution and current trends of the audio and video production industries. The student is expected to:

(A) summarize the history and evolution of audio and video production industries; and

(B) analyze the current trends of audio and video production industries.

(7) The student applies safety regulations. The student is expected to:

(A) consistently implement personal and workplace safety rules and regulations;

(B) recognize and resolve potential safety concerns; and

(C) follow emergency procedures.

(8) The student implements leadership characteristics in student organizations and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(9) The student implements ethical decision making and complies with laws regarding use of technology. The student is expected to:

(A) exhibit ethical conduct related to providing proper credit for ideas and privacy of sensitive content;

(B) discuss and apply copyright laws in relation to fair use and acquisition, trademark laws, personal privacy laws, and use of digital information by citing sources using established methods;

(C) model respect for intellectual property when manipulating, morphing, and editing graphics, video, text, and sound;

(D) demonstrate proper etiquette and knowledge of acceptable use policies when using networks, especially resources on the Internet and intranet; and

(E) analyze the impact of the audio/video production industry on society.

(10) The student demonstrates appropriate career-building characteristics and maintains a professional portfolio. The student is expected to:

(A) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(B) demonstrate skills in evaluating and comparing employment opportunities;

(C) examine and employ professional networking opportunities such as career and technical student organizations, professional social media, and industry professional organizations; and

(D) examine employment opportunities in entrepreneurship.

(11) The student employs effective planning and time-management skills to enhance productivity. The student is expected to:

(A) employ effective planning and time-management skills to complete work tasks; and

(B) use technology to enhance productivity.

(12) The student implements an advanced understanding of a client-based production in all stages of production. The student is expected to:

(A) determine and meet client needs by conducting client meetings to identify specific project requirements and target demographics; and

(B) develop a production proposal for client approval that includes a production schedule, research-based production costs, and appropriate delivery and distribution options.

(13) The student engages in pre-production activities for a successful execution of the project. The student is expected to:

(A) identify cast, crew, equipment, and location requirements;

(B) develop a budget with considerations for cast, crew, equipment, and location;

(C) analyze the script and storyboard processes; and

(D) assign team roles required for production.

(14) The student engages in production activities for successful execution of the project. The student is expected to:

(A) conduct a client meeting for presenting production strategies and implement client feedback;

(B) implement a coherent sequence of production events;

(C) use necessary equipment and crew for quality productions;

(D) demonstrate teamwork and knowledge of interpersonal skills with sensitivity to diversity;

(E) demonstrate appropriate use of editing systems; and

(F) make decisions appropriate for each element of production.

(15) The student engages in post-production activities for a successful output and distribution of the project. The student is expected to:

(A) make necessary adjustments regarding compatibility issues, including digital file formats and cross-platform connectivity;

(B) use various compression standards;

(C) research the appropriate delivery formats for the target audience;

(D) advise clients on optimal delivery options; and

(E) discuss distribution options with optimal project reach.

(16) The student practices business skills for freelance entrepreneurs. The student is expected to:

(A) implement standard freelance entrepreneur self-promotion techniques;

(B) develop proposals, standard billing, and collection practices;

(C) research freelance entrepreneur start-up practices; and

(D) use technology applications common to freelance entrepreneurs.

(17) The student develops an understanding of professional employment strategies through practical experience in the arts, audio/video technology, and communications career field. The student is expected to:

(A) identify types and requirements of potential employers;

(B) use professional etiquette and protocol in situations such as making introductions, speaking on the phone, communicating via electronic devices, offering and receiving criticism, and making follow-up communication; and

(C) exhibit appropriate grooming and attire.

(18) The student develops an understanding of appropriate interview strategies in professional contexts. The student is expected to:

(A) employ appropriate verbal, nonverbal, and listening skills;

(B) use clear and appropriate communications to convey skill set to others;

(C) understand and apply federal laws regarding lawful employment interviews; and

(D) identify and use appropriate strategies for dealing with diverse individuals.

Source: The provisions of this §130.112 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.113. Practicum in Printing and Imaging Technology (Two Credits), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: Printing and Imaging Technology II and Printing and Imaging Technology II Lab. 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. In addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the printing industry with a focus on finishing and bindery operations and customer-based projects. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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) identify and participate in training, education, or certification to prepare for employment;

(B) identify and demonstrate professional standards and personal qualities needed to be employable such as self-discipline, self-worth, positive attitude, integrity, and commitment; and

(C) demonstrate skills related to seeking, applying for, and obtaining a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills.

(2) The student applies academic knowledge and skills in printing and imaging projects. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student implements advanced communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) present information formally and informally;

(E) apply active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student implements advanced problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student implements advanced technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for printing and imaging projects.

(6) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations; and

(B) follow emergency procedures.

(7) The student implements leadership characteristics in student leadership and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits,

describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(8) The student implements ethical decision making and complies with laws regarding use of technology in printing. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) apply copyright laws in relation to fair use and duplication of materials;

(C) model respect for intellectual property;

(D) demonstrate proper etiquette and knowledge of acceptable use policies; and

(E) understand Creative Commons laws, including all licensing.

(9) The student implements career-building characteristics. The student is expected to:

(A) maintain, update, and present a portfolio with information such as work experiences, licenses, certifications, and work samples;

(B) demonstrate skills in evaluating and comparing employment opportunities; and

(C) examine employment opportunities in entrepreneurship.

(10) The student implements technical skills for efficiency. The student is expected to employ planning and time-management skills and tools to enhance results and complete work tasks.

(11) The student implements an advanced technical understanding of professional printing and imaging. The student is expected to:

(A) understand printing systems and their uses;

(B) manage the printing process;

(C) prepare customer documents;

(D) use appropriate printing processes;

(E) use binding processes, including cutting, folding, and trimming;

(F) calculate paper counts from a stock sheet;

(G) demonstrate folding a variety of print pieces, adapting equipment as needed;

(H) demonstrate saddle stitch, perfect bind, and flat stitching in various printed materials;

(I) demonstrate padding press operations;

(J) use appropriate embossing, foil stamping, die cutting, and laminating samples;

(K) print appropriate paper labels, ink jet labels, and bulk forms;

(L) demonstrate knowledge of postal regulations related to packages, contents, sizes, and destinations; and

(M) meet customer needs with regard to labeling, packaging, and shipping according to regulatory standards.

Source: The provisions of this §130.113 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.114. Practicum in Commercial Photography (Two Credits), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: Commercial Photography I and Commercial Photography I Lab along with teacher recommendation. 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in commercial photography span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the commercial photography industry with a focus on producing, promoting, and presenting professional quality photographs.

(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) participate in training, education, or certification for employment;

(B) demonstrate positive work behaviors and personal qualities needed to be employable; and

(C) demonstrate skills related to seeking, applying for, and obtaining a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills.

(2) The student applies academic knowledge and skills in commercial photography. The student is expected to:

(A) apply English language arts knowledge and skills in accordance with industry standards to a variety of written documents; and

(B) apply mathematics knowledge and skills in accordance with industry standards to solve a problem.

(3) The student applies professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) present information formally and informally;

(E) apply active listening skills to obtain and clarify information;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student understands and examines problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student is expected to use personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for commercial photography projects.

(6) The student applies knowledge of commercial photography systems. The student is expected to analyze and summarize the history and evolution of the commercial photography field.

(7) The student applies safety regulations. The student is expected to:

(A) implement personal and workplace safety rules and regulations in a photography studio and lab; and

(B) follow emergency procedures.

(8) The student applies leadership characteristics to student leadership and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(9) The student applies ethical decision making and complies with laws regarding use of technology in commercial photography. The student is expected to:

(A) demonstrate an understanding of ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) discuss and apply copyright laws in relation to fair use and duplication of images;

(C) model respect for intellectual property when manipulating, morphing, and editing digital images; and

(D) demonstrate proper etiquette and knowledge of acceptable use policies, including Creative Commons laws and licensing.

(10) The student develops career-building characteristics. The student is expected to:

(A) maintain and update portfolio to document information such as work experiences, licenses, certifications, and work samples; and

(B) demonstrate skills in evaluating and comparing employment opportunities.

(11) The student is expected to employ planning and time-management skills to complete work tasks such as creating quotes and budgeting. The student is expected to:

(A) employ planning and time-management skills to complete work tasks; and

(B) demonstrate skills in budgeting and creating quotes for freelance or contract projects.

(12) The student develops an increased understanding of commercial photography. The student is expected to:

(A) create photographs for defined purposes;

(B) apply the elements and principles of art to a variety of commercial photography projects;

(C) demonstrate the principles of commercial photography such as working with clients, interpreting client instructions, developing production schedules, and delivering products in a competitive market;

(D) demonstrate the use of appropriate cameras and lenses;

(E) apply appropriate photographic composition and layout principles;

(F) demonstrate appropriate digital black and white and color photography;

(G) apply effective photographic lighting techniques, including three point, studio, portraiture, and product;

(H) produce professional quality photographs;

(I) use the most appropriate types of photographic paper for projects;

(J) use the most appropriate solutions for mounting, matting, or framing photographs;

(K) demonstrate use of appropriate, current, and industry-standard production processes to produce photographs;

(L) evaluate photographs using principles of art, commercial photography standards, and critical-thinking skills; and

(M) demonstrate use of appropriate resolution and digital file formats.

Source: The provisions of this §130.114 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.115. Practicum in Fashion Design (Two Credits), Adopted 2015.

(a) General requirements. This course is for students in Grades 11 and 12. Prerequisite: Fashion Design II and Fashion Design II Lab. 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the business aspects of fashion, with emphasis on promotion and retailing. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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) identify and participate in training, education, or certification to prepare for employment;

(B) identify and demonstrate professional standards and personal qualities needed to be employable such as self-discipline, self-worth, positive attitude, integrity, and commitment;

(C) demonstrate skills related to seeking and applying for employment to find and obtain a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills;

(D) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(E) demonstrate skills in evaluating and comparing employment opportunities; and

(F) examine employment opportunities in entrepreneurship.

(2) The student applies academic knowledge and skills in fashion, textile, and apparel projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student implements advanced professional communications strategies. The student is expected to:

(A) adapt language for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information, data, and observations;

(D) deliver formal and informal presentations;

(E) apply active listening skills to obtain and clarify information;

(F) communicate with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student implements advanced problem-solving methods. The student is expected to:

(A) employ critical-thinking skills independently and in groups; and

(B) employ interpersonal skills in groups to solve problems.

(5) The student implements advanced technology applications. The student is expected to use personal information management, email, Internet, and industry programs for fashion, textiles, and apparel projects.

(6) The student implements advanced knowledge of fashion, textile, and apparel systems. The student evaluates the history of the fashion, textiles, and apparel field. The student is expected to compare fashion history relative to current fashions trends.

(7) The student applies safety regulations. The student is expected to implement personal and workplace safety rules and procedures.

(8) The student implements leadership characteristics in classroom and professional settings. The student is expected to:

(A) employ leadership skills to accomplish collective goals;

(B) employ practices for effective working relationships such as providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(C) conduct and participate in meetings using parliamentary procedure; and

(D) employ mentoring skills to inspire others.

(9) The student applies ethical decision making and complies with legal practices related to fashion, textiles, and apparel. The student is expected to:

(A) exhibit ethical conduct; and

(B) apply copyright laws.

(10) The student implements technical skills for efficiency. The student is expected to employ planning and time-management skills to complete work tasks.

(11) The student describes fundamentals of fashion buying. The student is expected to:

(A) explain processes for retail buying;

(B) identify wholesale market resources;

(C) compare various apparel markets;

(D) analyze how timing and pricing of fashion apparel and accessories are determined;

(E) analyze the price of a fashion product;

(F) describe various types of retail outlets;

(G) describe how offshore sourcing impacts fashion retailing; and

(H) compose a scenario plan for retail pricing, sales, inventory, and purchasing.

(12) The student describes the relationship between marketing and the fashion industry. The student is expected to:

(A) explain the marketing concept;

(B) relate marketing functions to the fashion industry;

(C) explain how each component of the marketing mix contributes to successful fashion marketing;

(D) explain the importance of target markets;

(E) describe advantages and disadvantages of market segmentation and mass marketing;

(F) research trends and emerging technologies affecting fashion marketing;

(G) determine examples of niche marketing;

(H) describe cultural and societal influences on the fashion market; and

(I) describe how international marketing has affected the fashion industry.

(13) The student develops, implements, and evaluates a promotional plan. The student is expected to:

(A) identify components of the promotional mix such as advertising, visual merchandising, and personal selling;

(B) demonstrate visual merchandising techniques for fashion goods, services, or ideas;

(C) analyze a promotional plan for effectiveness;

(D) describe deceptive practices in fashion promotion; and

(E) employ ethical practices in promotional activities.

(14) The student applies marketing techniques when assisting with promotional activities. The student is expected to:

(A) describe various types of business promotion strategies;

(B) classify types of customers and their motives for buying textile and apparel products;

(C) describe roles of public relations and publicity in product promotion;

(D) explain the use of promotional activities to market textile and apparel products and services;

(E) plan special fashion events such as fashion shows, trunk shows, retail shows, and educational events;

(F) create and develop a fashion show theme;

(G) develop a scale drawing to illustrate fashion show sets and staging;

(H) describe all fashion show responsibilities; and

(I) write press releases to publicize promotional activities.

(15) The student creates product displays using the principles of design. The student is expected to:

(A) identify components used in developing displays;

(B) determine ways in which design elements and principles are used in the creation of displays;

(C) describe types and uses of interior and exterior displays; and

(D) create window or other displays of fashion and apparel products.

(16) The student demonstrates effective customer service. The student is expected to:

(A) determine factors that promote quality customer relations;

(B) evaluate the impact of cultural diversity on customer relations;

(C) exhibit skills needed for effective customer service;

(D) create solutions to specific customer issues; and

(E) examine the role of selling fashion products in retail.

(17) The student identifies wholesale settings. The student is expected to:

(A) analyze motives for consumer fashion purchases;

(B) describe qualities of an effective salesperson;

(C) apply appropriate fashion vocabulary in selling situations; and

(D) demonstrate effective sales techniques from customer approach to closure.

(18) The student summarizes important business procedures in fashion retailing. The student is expected to:

(A) explain methods a business uses to control risks such as surveillance, safety training, and loss control;

(B) explain the use of inventory information such as preparing financial reports and making buying decisions;

(C) demonstrate cash and credit transaction methods;

(D) analyze data used to make accurate forecasts;

(E) demonstrate knowledge of the fashion buying process such as preparing a buying plan, completing purchase orders, and processing invoices;

(F) examine operational costs such as markup, markdown, cash flow, and other factors affecting profit; and

(G) demonstrate procedures for reporting and handling accidents, safety, and security incidents.

Source: The provisions of this §130.115 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.116. Practicum in Graphic Design and Illustration (Two Credits), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. Prerequisites: Graphic Design and Illustration II and Graphic Design and Illustration II Lab. 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster is focused on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in graphic design and illustration span all aspects of the advertising and visual communications industry. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop a technical understanding of the industry with a focus on skill proficiency. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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) identify and participate in training, education, or preparation for certification to prepare for employment;

(B) identify and demonstrate professional standards and personal qualities needed to be employable such as self-discipline, self-worth, positive attitude, integrity, and commitment;

(C) demonstrate skills related to seeking and applying for employment to find and obtain a desired job, including identifying job opportunities, developing a resume and letter of application, completing a job application, and demonstrating effective interview skills;

(D) maintain a career portfolio to document information such as work experiences, licenses, certifications, and work samples;

(E) demonstrate skills in evaluating and comparing employment opportunities; and

(F) examine employment opportunities in entrepreneurship.

(2) The student applies academic knowledge and skills in art and design projects. The student is expected to:

(A) apply English language arts knowledge by demonstrating skills such as correct use of content, technical concepts, vocabulary, grammar, punctuation, and terminology to write and edit a variety of documents; and

(B) apply mathematics knowledge and skills such as using whole numbers, decimals, fractions, and knowledge of arithmetic operations.

(3) The student implements advanced professional communications strategies. The student is expected to:

(A) adapt language such as structure and style for audience, purpose, situation, and intent;

(B) organize oral and written information;

(C) interpret and communicate information;

(D) deliver formal and informal presentations;

(E) apply active listening skills;

(F) listen to and speak with diverse individuals; and

(G) exhibit public relations skills to increase internal and external customer/client satisfaction.

(4) The student implements advanced problem-solving methods. The student is expected to:

(A) employ critical-thinking skills, including data gathering and interpretation, independently and in groups to solve problems and make decisions; and

(B) employ interpersonal skills in groups to solve problems and make decisions.

(5) The student implements advanced technology applications. The student is expected to use personal information management, email, Internet, writing and publishing, and presentation applications for graphic design and illustration projects.

(6) The student implements advanced knowledge of design systems. The student is expected to analyze and summarize the history and evolution of the commercial art and design field.

(7) The student applies cyber safety procedures. The student is expected to implement personal and professional safety rules and regulations.

(8) The student implements leadership characteristics in student leadership and professional development activities. The student is expected to:

(A) employ leadership skills to accomplish goals and objectives by analyzing the various roles of leaders within organizations, exhibiting problem-solving and management traits, describing effective leadership styles, and participating in civic and community leadership and teamwork opportunities to enhance skills;

(B) employ teamwork and conflict-management skills to achieve collective goals;

(C) establish and maintain effective working relationships by providing constructive praise and criticism, demonstrating sensitivity to and value for diversity, and managing stress and controlling emotions;

(D) prepare for meetings by developing goals and objectives to achieve within a scheduled time and producing agendas;

(E) conduct and participate in meetings to accomplish work tasks by achieving goals and objectives within a scheduled time; producing meeting minutes, including decisions and next steps; and using parliamentary procedures, as needed; and

(F) employ mentoring skills to inspire and teach others.

(9) The student applies ethical decision making and complies with laws regarding use of technology. The student is expected to:

(A) exhibit ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(B) discuss and apply copyright laws in relation to fair use and acquisition and use of digital information using established methods to cite sources;

(C) model respect of intellectual property when manipulating, morphing, and editing graphics, video, text, and sound;

(D) demonstrate proper etiquette and knowledge of acceptable use policies when using networks, especially resources on the Internet and intranet; and

(E) analyze and identify the impact of the advertising and visual communication design industry on society.

(10) The student applies effective planning and time-management skills. The student is expected to employ tools to enhance results and complete work tasks.

(11) The student uses advanced graphic design and illustration methods and skills. The student is expected to:

(A) interpret, evaluate, and justify design decisions;

(B) conduct verbal or written critiques of design projects; and

(C) identify and apply art elements and principles to designs and illustrations.

(12) The student employs a creative design process to create professional quality, two- or three-dimensional projects. The student is expected to:

(A) create designs for defined applications;

(B) use appropriate elements of design;

(C) use appropriate design principles and typography;

(D) use appropriate composition;

(E) use anatomically appropriate figure drawing;

(F) use appropriate perspective;

(G) use the most effective color choices in projects; and

(H) use appropriate printing concepts.

Source: The provisions of this §130.116 adopted to be effective August 28, 2017, 40 TexReg 6601.

§130.117. Extended Practicum in Animation (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 11 and 12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Arts, Audio/Video Technology, and Communications Career Cluster. Prerequisites: Animation II and Animation II Lab. Corequisite: Practicum in Animation. This course must be taken concurrently with Practicum in Animation and may not be taken as a stand-alone course. Students shall be awarded one credit 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in animation span all aspects of the arts, audio/video technology, and communications industry. Building upon the concepts taught in Animation II and Animation II Lab, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production animation products in a professional environment. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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 and employability skills as required by business and industry. The student is expected to:

(A) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to animation;

(B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment;

(C) demonstrate professional standards and personal qualities needed to be employable such as leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability with increased fluency;

(D) demonstrate technology applications skills such as effective use of social media, email, Internet, publishing tools, presentation tools, spreadsheets, or databases for animation projects with increased fluency;

(E) use appropriate vocabulary and correct grammar and punctuation to compose and edit copy for a variety of written documents such as scripts, captions, schedules, reports, manuals, proposals, and other client-based documents; and

(F) employ effective planning and time-management skills with increased fluency 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 implements advanced professional communications strategies. The student is expected to:

(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner;

(B) analyze, interpret, and effectively communicate information, data, and observations;

(C) create and deliver formal and informal presentations effectively;

(D) observe and interpret verbal and nonverbal cues and behaviors to enhance communication; and

(E) exhibit public relations skills to maintain internal and external customer/client satisfaction.

(3) The student implements advanced problem-solving methods. The student is expected to:

(A) employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions;

(B) analyze elements of a problem to develop creative and innovative solutions; and

(C) demonstrate the transfer and adaptation of knowledge through the creation of original work.

(4) The student understands and applies proper safety techniques in the workplace. The student is expected to demonstrate an understanding of and consistently follow workplace safety rules and regulations.

(5) The student understands the professional, ethical, and legal responsibilities in animation. The student is expected to:

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

(B) exhibit ethical conduct by providing proper credit for ideas and maintaining privacy of sensitive content;

(C) model respect for intellectual property when manipulating, morphing, and editing graphics, video, text, and sound;

(D) practice safe, legal, and responsible use of information and technology; and

(E) comply with all applicable rules, laws, and regulations in a consistent manner.

(6) The student engages in production activities for successful execution of an animation experience or project. The student is expected to:

(A) conduct, document, and evaluate learning activities in a supervised animation experience;

(B) develop advanced technical knowledge and skills related to the student's occupational objective;

(C) implement an appropriate coherent sequence of production events;

(D) demonstrate appropriate use of necessary equipment and crew for quality productions;

(E) demonstrate appropriate use of editing systems;

(F) monitor production schedule, research-based production costs, and delivery and distribution to ensure alignment with client needs and expectations;

(G) make necessary adjustments regarding compatibility issues, including digital file formats and cross-platform connectivity;

(H) implement the appropriate delivery formats for the target audience;

(I) analyze distribution options to achieve optimal project reach;

(J) demonstrate growth of technical skill competencies;

(K) evaluate strengths and weaknesses in technical skill proficiency; and

(L) collect representative work samples.

Source: The provisions of this §130.117 adopted to be effective August 28, 2017, 41 TexReg 614.

§130.118. Extended Practicum in Audio/Video Production (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 11 and 12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Arts, Audio/Video Technology, and Communications Career Cluster. Prerequisites: Audio/Video Production II and Audio/Video Production II Lab. Corequisite: Practicum in Audio/Video Production. This course must be taken concurrently with Practicum in Audio/Video Production and may not be taken as a stand-alone course. Students shall be awarded one credit 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in audio/video production span all aspects of the audio/video communications industry. Building upon the concepts taught in Audio/Video Production II and Audio/Video Production II Lab, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an increasing understanding of the industry with a focus on applying pre-production, production, and post-production audio and video products in a professional environment. This course may be implemented in an advanced audio/video or audio format. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to audio/video production;

(B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment;

(C) demonstrate professional standards and personal qualities needed to be employable such as effective oral and written communication, leadership, teamwork, appreciation for diversity, conflict management, customer service, work ethic, and adaptability with increased fluency;

(D) demonstrate technology applications skills such as effective use of social media, email, Internet, publishing tools, presentation tools, spreadsheets, or databases for audio and video production projects with increased fluency;

(E) use appropriate vocabulary and correct grammar and punctuation to compose and edit copy for a variety of written documents such as scripts, captions, schedules, reports, manuals, proposals, and other client-based documents; and

(F) employ effective planning and time-management skills with increased fluency to complete work tasks.

(2) The student implements advanced professional communications strategies. The student is expected to:

(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner;

(B) analyze, interpret, and effectively communicate information, data, and observations;

(C) create and deliver formal and informal presentations effectively; and

(D) exhibit public relations skills to maintain internal and external customer/client satisfaction.

(3) The student implements advanced problem-solving methods. The student is expected to:

(A) employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions; and

(B) demonstrate the transfer and adaptation of knowledge through the creation of original work.

(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:

(A) demonstrate an understanding of and consistently follow workplace safety rules and regulations; and

(B) recognize and resolve potential safety concerns.

(5) The student understands the professional, ethical, and legal responsibilities in audio/video production. The student is expected to:

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

(B) exhibit ethical conduct by providing proper credit for ideas and maintaining privacy of sensitive content;

(C) model respect for intellectual property when manipulating, morphing, and editing graphics, video, text, and sound;

(D) practice safe, legal, and responsible use of information and technology;

(E) show integrity by choosing the ethical course of action when making decisions; and

(F) comply with all applicable rules, laws, and regulations in a consistent manner.

(6) The student participates in an audio/video production experience. The student is expected to:

(A) conduct, document, and evaluate learning activities in a supervised audio/video production experience;

(B) develop advanced technical knowledge and skills related to the student's occupational objective;

(C) demonstrate an advanced understanding of a client-based production in all stages of production;

(D) engage in pre-production activities such as identifying cast, crew, equipment, and location requirements; developing a budget; and analyzing script and storyboard processes for successful execution of a project;

(E) engage in production activities for successful execution of the project, including making decisions appropriate for each element of a production;

(F) engage in post-production activities such as making necessary adjustments regarding compatibility issues, including digital file formats and cross-platform connectivity, and researching the appropriate delivery formats for the target audience for a successful output and distribution of a project;

(G) demonstrate growth of technical skill competencies;

(H) evaluate strengths and weaknesses in technical skill proficiency; and

(I) collect representative work samples.

Source: The provisions of this §130.118 adopted to be effective August 28, 2017, 41 TexReg 614.

§130.119. Extended Practicum in Printing and Imaging Technology (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Arts, Audio/Video Technology, and Communications Career Cluster. Prerequisites: Printing and Imaging Technology II and Printing and Imaging Technology II Lab. Corequisite: Practicum in Printing and Imaging Technology. This course must be taken concurrently with Practicum in Printing and Imaging Technology and may not be taken as a stand-alone course. Students shall be awarded one credit 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in printing span all aspects of the industry, including prepress, press, and finishing and bindery operations. In addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the printing industry with a focus on finishing and bindery operations and customer-based projects. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to printing and imaging technology;

(B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment;

(C) demonstrate professional standards and personal qualities needed to be employable such as self-discipline, self-worth, positive attitude, integrity, and commitment with increased fluency;

(D) demonstrate use of personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for printing and imaging projects with increased fluency;

(E) employ teamwork and conflict-management skills with increased fluency to achieve collective goals; and

(F) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks.

(2) The student implements advanced communications strategies. The student is expected to:

(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner;

(B) present information formally and informally effectively;

(C) apply active listening skills to obtain and clarify information; and

(D) exhibit public relations skills to maintain internal and external customer/client satisfaction.

(3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.

(4) The student understands and applies proper safety and security techniques in the workplace. The student is expected to demonstrate an understanding of and consistently follow workplace safety rules and regulations.

(5) The student understands the professional, ethical, and legal responsibilities in printing and imaging technology. The student is expected to:

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

(B) exhibit ethical conduct by maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(C) apply copyright laws in relation to fair use and duplication of materials in a consistent manner;

(D) apply Creative Commons laws, including all licensing; and

(E) comply with all applicable rules, laws, and regulations in a consistent manner.

(6) The student implements an advanced technical understanding of professional printing and imaging. The student is expected to:

(A) conduct, document, and evaluate learning activities in a supervised printing and imaging technology experience;

(B) practice use of various printing systems;

(C) demonstrate use of appropriate printing processes with increased fluency;

(D) demonstrate use of binding processes such as cutting, folding, and trimming with increased fluency;

(E) demonstrate folding of a variety of print pieces by adapting equipment as needed;

(F) use appropriate embossing, foil stamping, die cutting, and laminating samples with increased fluency;

(G) meet customer needs for labeling, packaging, and shipping according to regulatory standards;

(H) develop advanced technical knowledge and skills related to the student's occupational objective;

(I) demonstrate growth of technical skill competencies;

(J) evaluate strengths and weaknesses in technical skill proficiency; and

(K) collect representative work samples.

Source: The provisions of this §130.119 adopted to be effective August 28, 2017, 41 TexReg 614.

§130.120. Extended Practicum in Commercial Photography (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Arts, Audio/Video Technology, and Communications Career Cluster. Prerequisites: Commercial Photography I and Commercial Photography I Lab along with teacher recommendation. Corequisite: Practicum in Commercial Photography. This course must be taken concurrently with Practicum in Commercial Photography and may not be taken as a stand-alone course. Students shall be awarded one credit 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in commercial photography span all aspects of the industry from setting up a shot to delivering products in a competitive market. In addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the commercial photography industry with a focus on producing, promoting, and presenting professional quality photographs.

(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) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to commercial photography;

(B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment;

(C) demonstrate positive work behaviors and personal qualities needed to be employable with increased fluency;

(D) demonstrate use of personal information management, email, Internet, writing and publishing, presentation, and spreadsheet or database applications for commercial photography projects with increased fluency;

(E) employ teamwork and conflict-management skills with increased fluency to achieve collective goals; and

(F) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks.

(2) The student applies professional communications strategies. The student is expected to:

(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner;

(B) analyze, interpret, and effectively communicate information, data, and observations;

(C) present information formally and informally effectively;

(D) apply active listening skills to obtain and clarify information; and

(E) exhibit public relations skills to maintain internal and external customer/client satisfaction.

(3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.

(4) The student understands and applies proper safety techniques in the workplace. The student is expected to demonstrate understanding of and consistently follow workplace safety rules and regulations.

(5) The student understands the professional, ethical, and legal responsibilities in commercial photography. The student is expected to:

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

(B) practice ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas; and

(C) comply with all applicable rules, laws, and regulations in a consistent manner.

(6) The student participates in a commercial photography experience. The student is expected to:

(A) conduct, document, and evaluate learning activities in a supervised commercial photography experience;

(B) demonstrate the use of appropriate cameras and lenses with increased proficiency;

(C) apply appropriate photographic composition and layout principles with increased fluency;

(D) apply effective photographic lighting techniques such as three point, studio, portraiture, and product with increased fluency;

(E) produce professional-quality photographs;

(F) demonstrate use of the most appropriate types of photographic paper for projects;

(G) demonstrate use of the most appropriate solutions for mounting, matting, or framing photographs;

(H) demonstrate use of appropriate, current, and industry-standard production processes to produce photographs;

(I) demonstrate use of appropriate resolution and digital file formats;

(J) demonstrate growth of technical skill competencies;

(K) evaluate strengths and weaknesses in technical skill proficiency; and

(L) collect representative work samples.

Source: The provisions of this §130.120 adopted to be effective August 28, 2017, 41 TexReg 614.

§130.121. Extended Practicum in Fashion Design (One Credit), Adopted 2015.

(a) General requirements. This course is for students in Grades 11 and 12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Arts, Audio/Video Technology, and Communications Career Cluster. Prerequisite: Fashion Design II and Fashion Design II Lab. Corequisite: Practicum in Fashion Design. This course must be taken concurrently with Practicum in Fashion Design and may not be taken as a stand-alone course. Students shall be awarded one credit 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in fashion span all aspects of the textile and apparel industries. Within this context, in addition to developing advanced technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop an advanced technical understanding of the business aspects of fashion, with emphasis on promotion and retailing. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to fashion design;

(B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment;

(C) demonstrate professional standards and personal qualities needed to be employable such as self-discipline, self-worth, positive attitude, integrity, and commitment with increased fluency;

(D) demonstrate use of personal information management, email, Internet, and industry programs for fashion, textiles, and apparel projects with increased fluency; and

(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks.

(2) The student implements advanced professional communications strategies. The student is expected to:

(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner;

(B) analyze, interpret, and effectively communicate information, data, and observations;

(C) apply active listening skills to obtain and clarify information;

(D) observe and interpret verbal and nonverbal cues and behaviors to enhance communication; and

(E) exhibit public relations skills to maintain internal and external customer/client satisfaction.

(3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.

(4) The student understands and applies proper safety techniques in the workplace. The student is expected to:

(A) demonstrate understanding of and consistently follow workplace safety rules and regulations; and

(B) demonstrate procedures for reporting and handling accidents, safety, and security incidents.

(5) The student understands the professional, ethical, and legal responsibilities in fashion design. The student is expected to:

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

(B) practice ethical conduct related to interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(C) employ ethical practices in promotional activities; and

(D) comply with all applicable rules, laws, and regulations in a consistent manner.

(6) The student participates in a fashion design experience. The student is expected to:

(A) conduct, document, and evaluate learning activities in a supervised fashion design experience;

(B) compose a scenario plan for retail pricing, sales, inventory, and purchasing;

(C) plan special fashion events such as fashion shows, trunk shows, retail shows, and educational events;

(D) create product displays using the principles of design;

(E) implement aspects of the fashion buying process such as preparing a buying plan, completing purchase orders, and processing invoices;

(F) demonstrate growth of technical skill competencies;

(G) evaluate strengths and weaknesses in technical skill proficiency; and

(H) collect representative work samples.

Source: The provisions of this §130.121 adopted to be effective August 28, 2017, 41 TexReg 614; amended to be effective January 31, 2018, 43 TexReg 464.

§130.122. Extended Practicum in Graphic Design and Illustration (One Credit), Adopted 2015.

(a) General requirements. This course is recommended for students in Grades 10-12. The practicum course is a paid or unpaid capstone experience for students participating in a coherent sequence of career and technical education courses in the Arts, Audio/Video Technology, and Communications Career Cluster. Prerequisites: Graphic Design and Illustration II and Graphic Design and Illustration II Lab. Corequisite: Practicum in Graphic Design and Illustration. This course must be taken concurrently with Practicum in Graphic Design and Illustration and may not be taken as a stand-alone course. Students shall be awarded one credit 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.

(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 Arts, Audio/Video Technology, and Communications Career Cluster is focused on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content, including visual and performing arts and design, journalism, and entertainment services.

(3) Careers in graphic design and illustration span all aspects of the advertising and visual communications industry. Within this context, in addition to developing technical knowledge and skills needed for success in the Arts, Audio/Video Technology, and Communications Career Cluster, students will be expected to develop a technical understanding of the industry with a focus on skill proficiency. Instruction may be delivered through lab-based classroom experiences or career preparation opportunities.

(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) participate in a paid or unpaid, laboratory- or work-based application of previously studied knowledge and skills related to graphic design or illustration;

(B) participate in training, education, or preparation for licensure, certification, or other relevant credentials to prepare for employment;

(C) demonstrate professional standards and personal qualities needed to be employable such as self-discipline, self-worth, positive attitude, integrity, and commitment with increased fluency;

(D) demonstrate use of personal information management, email, Internet, writing and publishing, and presentation applications for graphic design and illustration projects with increased fluency; and

(E) employ planning and time-management skills and tools with increased fluency to enhance results and complete work tasks.

(2) The student implements advanced professional communications strategies. The student is expected to:

(A) demonstrate verbal and non-verbal communication consistently in a clear, concise, and effective manner;

(B) analyze, interpret, and effectively communicate information;

(C) apply active listening skills to obtain and clarify information; and

(D) exhibit public relations skills to maintain internal and external customer/client satisfaction.

(3) The student implements advanced problem-solving methods. The student is expected to employ critical-thinking skills with increased fluency both independently and in groups to solve problems and make decisions.

(4) The student understands and applies proper safety techniques in the workplace. The student is expected to demonstrate understanding of and consistently follow workplace safety rules and regulations.

(5) The student understands the professional, ethical, and legal responsibilities in graphic design and illustration. The student is expected to:

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

(B) practice safe, responsible, and legal behavior while using technology tools and resources;

(C) practice ethical conduct when interacting with others such as maintaining client confidentiality and privacy of sensitive content and providing proper credit for ideas;

(D) apply copyright laws in relation to fair use and acquisition and use of digital information using established methods to cite sources;

(E) practice respect for intellectual property when manipulating, morphing, and editing graphics, video, text, and sound;

(F) demonstrate proper etiquette and knowledge of acceptable use policies when using networks, especially resources on the Internet and intranet; and

(G) comply with all applicable rules, laws, and regulations in a consistent manner.

(6) The student participates in a graphic design and illustration experience. The student is expected to:

(A) conduct, document, and evaluate learning activities in a supervised graphic design and illustration experience;

(B) interpret, evaluate, and justify design decisions;

(C) identify and apply art elements and principles to designs and illustrations with increased fluency;

(D) employ a creative design process to create professional-quality, two- or three-dimensional projects;

(E) demonstrate growth of technical skill competencies;

(F) evaluate strengths and weaknesses in technical skill proficiency; and

(G) collect representative work samples.

Source: The provisions of this §130.122 adopted to be effective August 28, 2017, 41 TexReg 614.

§130.123. Digital Design and Media Production (One Credit).

(a) General requirements. Students shall be awarded one credit for successful completion of this course. This course is recommended for students in Grades 9-12.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

(3) Digital Design and Media Production will allow students to demonstrate creative thinking, develop innovative strategies, and use communication tools in order to work effectively with others as well as independently. Students will gather information electronically, which will allow for problem solving and making informed decisions regarding media projects. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. Students will demonstrate a thorough understanding of digital design principles that is transferable to other disciplines. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

(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) Creativity and innovation. The student employs a creative design process to create original projects as they relate to purposes and audiences. The student is expected to:

(A) create designs for defined projects such as graphics, logos, and page layouts;

(B) apply design elements and typography standards; and

(C) use visual composition principles.

(2) Communication and collaboration. The student understands professional digital media communications strategies. The student is expected to:

(A) adapt the language and design of a project for audience, purpose, situation, and intent;

(B) organize oral, written, and graphic information into formal and informal publications;

(C) interpret and communicate information to multiple audiences; and

(D) collaborate to create original projects, including seeking and responding to advice from others such as peers or experts in the creation and evaluation process.

(3) Research and information fluency. The student uses a variety of strategies to plan, obtain, evaluate, and use valid information. The student is expected to:

(A) obtain print and digital information such as graphics, audio, and video from a variety of resources while citing the sources;

(B) evaluate information for accuracy and validity; and

(C) present accurate information using techniques appropriate for the intended audience.

(4) Critical thinking, problem solving, and decision making. The student implements problem-solving methods using critical-thinking skills to plan, implement, manage, and evaluate projects; solve problems; and make informed decisions using appropriate digital tools and resources. The student is expected to:

(A) employ critical-thinking and interpersonal skills to solve problems and make decisions through planning and gathering, interpreting, and evaluating data;

(B) identify and organize the tasks for completion of a project using the most appropriate digital tools;

(C) distinguish design requirements as they relate to the purposes and audiences of a project and apply appropriate design elements;

(D) seek and respond to input from others, including peers, teachers, and outside collaborators;

(E) evaluate a process and project both independently and collaboratively and make suggested revisions; and

(F) transfer critical-thinking, problem-solving, and decision-making processes when using new technologies.

(5) Digital citizenship. The student complies with standard practices and behaviors and upholds legal and ethical responsibilities. The student is expected to:

(A) examine copyright and fair use guidelines with regard to print and digital media;

(B) model ethical and legal acquisition and use of digital resources such as licensing and established methods of citing sources;

(C) demonstrate proper digital etiquette, personal security guidelines, use of network resources, and application of the district's acceptable use policy for technology; and

(D) identify and demonstrate positive personal qualities such as flexibility, open-mindedness, initiative, listening attentively to speakers, willingness to learn new knowledge and skills, and pride in quality work.

(6) Technology operations and concepts. The student uses technology concepts, systems, and operations as appropriate for a project. The student is expected to:

(A) define the purpose of a product and identify the specified audience;

(B) demonstrate appropriate project management to:

(i) create a plan for a media project such as a storyboard, stage development, and identification of equipment and resources; and

(ii) evaluate design, content delivery, purpose, and audience throughout a project's timeline and make suggested revisions until completion of the project;

(C) use hardware, software, and information appropriate to a project and its audience to:

(i) acquire readily available digital information, including text, audio, video, and graphics, citing the sources;

(ii) create digital content through the use of various devices such as video camera, digital camera, scanner, microphone, interactive whiteboard, video capture, and musical instrument;

(iii) collaborate via online tools such as blogs, discussion boards, email, and online learning communities;

(iv) make decisions regarding the selection and use of software, taking into consideration operating system platform, quality, appropriateness, effectiveness, and efficiency;

(v) delineate and make necessary adjustments regarding compatibility issues, including digital file formats and cross-platform connectivity; and

(vi) demonstrate the ability to import and export elements from one program to another;

(D) use digital typography standards such as:

(i) one space after punctuation, the use of em- and en-dashes, and smart quotation marks;

(ii) categories of type, font, size, style, and alignment appropriate for the task;

(iii) type techniques such as drop cap, decorative letters, or embedded text frames as graphic elements;

(iv) leading and kerning, automatic text flow into linked columns, widows and orphans, and text wrap; and

(v) type measurement for inches and picas;

(E) apply design and layout principles and techniques to:

(i) incorporate the principles of design, including balance, contrast, dominant element, white space, consistency, repetition, alignment, and proximity;

(ii) apply the elements of design, including text, graphics, and white space;

(iii) apply color principles appropriate to the product in order to communicate the mood for the specific audience;

(iv) identify the parts of pages, including inside margin, outside margin, and gutter;

(v) create a master template, including page specifications and other repetitive elements; and

(vi) use style sheets, including a variety of type specifications such as typeface, style, size, alignment, indents, and tabs;

(F) demonstrate appropriate use of digital photography and editing to:

(i) use digital photography equipment to capture still-shot images that incorporate various photo composition techniques, including lighting, perspective, candid versus posed, rule of thirds, and filling the frame;

(ii) transfer digital images from equipment to the computer; and

(iii) demonstrate image enhancement techniques such as feathering, layering, color enhancement, and image selection using appropriate digital manipulation software;

(G) demonstrate appropriate use of videography equipment and techniques to:

(i) use digital photography equipment to capture video that incorporates video principles such as lighting, zooming, panning, and stabilization;

(ii) transfer video from equipment to the computer;

(iii) demonstrate videographic enhancement and editing techniques such as transitions, zooming, content editing, and synchronizing audio and video using appropriate digital manipulation software; and

(iv) export video in digital formats to be used in various delivery systems such as podcasting, downloadable media, embedding, and streaming; and

(H) deploy digital media into print, web, and video products to:

(i) produce digital files in various formats such as portable document format (PDF), portable network graphics (PNG), and HyperText Markup Language (HTML);

(ii) publish integrated digital content such as video, audio, text, graphics, and motion graphics following appropriate digital etiquette standards;

(iii) publish and share projects using online methods such as social media and collaborative sites;

(iv) incorporate various digital media into a printed document such as a newsletter, poster, or report;

(v) use printing options such as tiling, color separations, and collation; and

(vi) collect and organize student-created products to build an individual portfolio.

Source: The provisions of this §130.123 adopted to be effective August 1, 2020, 45 TexReg 4190.

§130.124. Digital Art and Animation (One Credit).

(a) General requirements. Students shall be awarded one credit for successful completion of this course. Recommended prerequisite: Art, Level I. This course is recommended for students in Grades 9-12. This course satisfies the high school fine arts graduation requirement.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

(3) Digital Art and Animation consists of computer images and animations created with digital imaging software. Digital Art and Animation has applications in many careers, including graphic design, advertising, web design, animation, corporate communications, illustration, character development, script writing, storyboarding, directing, producing, inking, project management, editing, and the magazine, television, film, and game industries. Students in this course will produce various real-world projects and animations. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

(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) Creativity and innovation. The student demonstrates creative thinking, constructs knowledge, and develops innovative products and processes using technology. The student is expected to:

(A) evaluate, edit, and create scripts for animations;

(B) identify and apply color theories, including harmony rules, tints, shades, gradients, color mixing, new color creation, and the visual impacts of specific color combinations using a digital format;

(C) compare, contrast, and integrate the basic sound editing principles, including mixing and manipulating wave forms, audio tracks, and effects;

(D) compare and contrast the rules of composition such as the rule of thirds or the golden section/rectangle with respect to harmony and balance;

(E) evaluate the fundamental concepts of a digital art and design such as composition, perspective, angles, lighting, repetition, proximity, white space, balance, and contrast;

(F) analyze digital art designs to interpret the point of interest, the prominence of the subject, and visual parallels between the structures of natural and human-made environments;

(G) distinguish among typefaces while recognizing and resolving conflicts that occur through the use of typography as a design element;

(H) use perspective, including backgrounds, light, shades and shadows, hue and saturation, and scale, to capture a focal point and create depth;

(I) use the basic principles of design such as proportion, balance, variety, emphasis, harmony, symmetry, and unity in type, color, size, line thickness, shape, and space;

(J) edit files using appropriate digital editing tools and established design principles such as consistency, repetition, alignment, proximity, white space, image file size, color use, and font size, type, and style; and

(K) identify pictorial qualities in a design such as shape and form, space and depth, or pattern and texture to create visual unity and desired effects in designs.

(2) Communication and collaboration. The student uses digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning experience of others. The student is expected to:

(A) use vocabulary as it relates to digital art, audio, and animation;

(B) demonstrate the use of technology to participate in self-directed and collaborative activities within the global community;

(C) participate in electronic communities;

(D) create technology specifications for tasks and rubrics for the evaluation of products;

(E) design and implement procedures to track trends, set timelines, and evaluate products;

(F) collaborate with peers in delineating technological tasks;

(G) publish and save information in a variety of ways, including print or digital formats;

(H) analyze and evaluate projects for design, content delivery, purpose, and audience; and

(I) critique original digital artwork, portfolios, and products with peers.

(3) Research and information fluency. The student applies digital tools to gather, evaluate, and use information. The student is expected to:

(A) distinguish between and correctly apply process color (RGB and CYMK), spot color, and black or white;

(B) research the history of digital art and animation;

(C) research career choices in digital art and animation;

(D) use the Internet to retrieve information in an electronic format;

(E) demonstrate the appropriate use of digital imaging, video integration, and sound retrieved from an electronic format;

(F) import sounds from a variety of sources; and

(G) create planning designs such as rough sketches, storyboards, and brainstorming materials.

(4) Critical thinking, problem solving, and decision making. The student uses critical-thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. The student is expected to:

(A) distinguish between and use the components of animation software programs such as cast, score, stage, and the animation manipulation interface;

(B) distinguish between and use different animation techniques such as path and cell animation, onion skinning, and tweening;

(C) create three-dimensional effects by layering images such as foreground, middle distance, and background images;

(D) apply a variety of color schemes such as monochromatic, analogous, complementary, primary/secondary triads, cool/warm colors, and split complements to digital designs;

(E) use the basic concepts of color and design theory such as working in a bitmapped and vector mode to create backgrounds, characters, and other cast members as needed for the animation;

(F) use the appropriate scripting language or program code to create an animation;

(G) use a variety of lighting techniques such as shadows and shading to create effects; and

(H) define the design attributes and requirements of products created for a variety of purposes such as posters, billboards, logos, corporate identity, advertisements, book jackets, brochures, and magazines.

(5) Digital citizenship. The student understands human, cultural, and societal issues related to technology and practices legal and ethical behavior. The student is expected to:

(A) discuss copyright laws/issues and use of digital information such as attributing ideas and citing sources using established methods;

(B) define plagiarism and model respect of intellectual property;

(C) demonstrate proper digital etiquette and knowledge of acceptable use policies when using technology; and

(D) evaluate the validity and reliability of sources.

(6) Technology operations and concepts. The student demonstrates a sound understanding of technology concepts, systems, and operations. The student is expected to:

(A) demonstrate knowledge and appropriate use of operating systems, software applications, and communication and networking components;

(B) make decisions regarding the selection and use of software and Internet resources;

(C) make necessary adjustments regarding compatibility issues with digital file formats, importing and exporting data, and cross-platform compatibility; and

(D) read, use, and develop technical documentation.

Source: The provisions of this §130.124 adopted to be effective August 1, 2020, 45 TexReg 4190.

§130.125. 3-D Modeling and Animation (One Credit)

(a) General requirements. Students shall be awarded one credit for successful completion of this course. Recommended prerequisite: Art, Level I. This course is recommended for students in Grades 9-12. This course satisfies the high school fine arts graduation requirement.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

(3) 3-D Modeling and Animation consists of computer images created in a virtual three-dimensional (3-D) environment. 3-D Modeling and Animation has applications in many careers, including criminal justice, crime scene, and legal applications; construction and architecture; engineering and design; and the movie and game industries. Students in this course will produce various 3-D models of real-world objects. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

(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) Creativity and innovation. The student demonstrates creative thinking, constructs knowledge, and develops innovative products and processes using technology. The student is expected to:

(A) evaluate, edit, and create scripts for animations;

(B) identify and apply color theories, including harmony rules, tints, shades, gradients, color mixing, new color creation, and the visual impacts of specific color combinations using a digital format;

(C) apply texture, transparency, skinning, and contour along a 3-D object surface;

(D) compare, contrast, and integrate the basic sound editing principles, including mixing and manipulating wave forms, audio tracks, and effects;

(E) compare and contrast the rules of composition such as the rule of thirds or the golden section/rectangle with respect to harmony and balance;

(F) evaluate the fundamental concepts of 3-D modeling and design such as composition, perspective, angles, lighting, repetition, proximity, white space, balance, and contrast;

(G) analyze 3-D model objects to interpret the point of interest, the prominence of the subject, and visual parallels between the structures of natural and human-made environments;

(H) distinguish among typefaces while recognizing and resolving conflicts that occur through the use of typography as a design element;

(I) use perspective, including spot and directional light, backgrounds, ambience, shades and shadows, and hue and saturation;

(J) use the basic principles of design such as proportion, balance, variety, emphasis, harmony, symmetry, and unity in type, color, size, line thickness, shape, and space;

(K) edit files using appropriate digital editing tools and established design principles such as consistency, repetition, alignment, proximity, white space, image file size, color use, font size, type, and style; and

(L) identify pictorial qualities in a design such as shape and form, space and depth, or pattern and texture to create visual unity and desired effects in designs.

(2) Communication and collaboration. The student uses digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning experience of others. The student is expected to:

(A) use vocabulary as it relates to digital art, audio, and animation;

(B) demonstrate the use of technology to participate in self-directed and collaborative activities within the global community;

(C) participate in electronic communities;

(D) create technology specifications for tasks and rubrics for the evaluation of products;

(E) design and implement procedures to track trends, set timelines, and evaluate products;

(F) collaborate with peers in delineating technological tasks;

(G) publish and save information in a variety of ways, including print or digital formats;

(H) analyze and evaluate projects for design, content delivery, purpose, and audience; and

(I) critique original 3-D digital artwork, portfolios, and products with peers.

(3) Research and information fluency. The student applies digital tools to gather, evaluate, and use information. The student is expected to:

(A) distinguish among and correctly apply process color (RGB and CYMK), spot color, and black or white;

(B) research the history of 3-D modeling and 3-D animation;

(C) research career choices in 3-D modeling and 3-D animation;

(D) use the Internet to retrieve information in an electronic format;

(E) demonstrate the appropriate use of 3-D objects, digital imaging, video integration, and sound retrieved from an electronic format;

(F) import sounds from a variety of sources; and

(G) create planning designs such as rough sketches, storyboards, and brainstorming materials.

(4) Critical thinking, problem solving, and decision making. The student uses critical-thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. The student is expected to:

(A) distinguish between and use the components of 3-D animation software programs such as cast, score, environment, the X-Y-Z coordinate system, and the animation manipulation interface;

(B) distinguish between and use the different 3-D modeling techniques such as box modeling, transformation, and polygon primitives using extrusion and rotation;

(C) distinguish between and use the different 3-D animation techniques such as path and rendering using dynamics and physics;

(D) apply a variety of color schemes such as monochromatic, analogous, complementary, primary/secondary triads, cool/warm colors, and split complements to digital designs;

(E) use the basic concepts of color and design theory such as working with 3-D models and environments, characters, objects, and other cast members as needed for the animation;

(F) use the appropriate rendering techniques to create an animation;

(G) use a variety of lighting techniques such as shadow, shading, point, spot, directional, and ambient to create effects; and

(H) define the design attributes and requirements of a 3-D animation project.

(5) Digital citizenship. The student understands human, cultural, and societal issues related to technology and practices legal and ethical behavior. The student is expected to:

(A) discuss copyright laws/issues and use of digital information such as attributing ideas and citing sources using established methods;

(B) define plagiarism and model respect of intellectual property;

(C) demonstrate proper digital etiquette and knowledge of acceptable use policies when using technology; and

(D) evaluate the validity and reliability of sources.

(6) Technology operations and concepts. The student demonstrates a sound understanding of technology concepts, systems, and operations. The student is expected to:

(A) demonstrate knowledge and appropriate use of operating systems, software applications, and communication and networking components;

(B) make decisions regarding the selection and use of software and Internet resources;

(C) make necessary adjustments regarding compatibility issues with digital file formats, importing and exporting data, and cross-platform compatibility; and

(D) read, use, and develop technical documentation.

Source: The provisions of this §130.125 adopted to be effective August 1, 2020, 45 TexReg 4190.

§130.126. Digital Communications in the 21st Century (One Credit).

(a) General requirements. Students shall be awarded one credit for successful completion of this course. This course is recommended for students in Grades 9-12.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

(3) Digital Communications in the 21st Century will prepare students for the societal demands of increased civic literacy, independent working environments, global awareness, and the mastery of a base set of analysis and communication skills. Students will be expected to design and present an effective product based on well-researched issues in order to thoughtfully propose suggested solutions to authoritative stakeholders. The outcome of the process and product approach is to provide students an authentic platform to demonstrate effective application of multimedia tools within the contexts of global communication and collaborative communities and appropriately share their voices to affect change that concerns their future. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

(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) Creativity and innovation. The student demonstrates the ability to analyze, evaluate, and adapt during the creative problem-solving process and demonstrates creative thinking in developing solutions to real-world issues using digital tools. The student is expected to:

(A) generate innovative, sustainable solutions for real-world issues such as global warming, immigration, or the global economy using emerging digital tools;

(B) gather and evaluate accurate information for feasibility and practicality as a basis for making communication decisions; and

(C) analyze the ethical and social responsibilities as a project team when communicating with peers, stakeholders, and experts.

(2) Creativity and innovation. The student uses innovative thinking to develop new ideas and processes for solving real-world issues and conveying those ideas to a global audience through a persuasive digital product. The student is expected to:

(A) examine real-world issues relating to current topics such as health care, government, business, or aerospace;

(B) develop innovative solutions to address issues;

(C) create unique methods and products conveying solutions to audiences beyond the classroom such as school officials, non-profit organizations, higher education officials, government, or other stakeholders;

(D) demonstrate the effective use and importance of verbal and nonverbal communication skills when presenting ideas and solutions to diverse audiences; and

(E) use appropriate techniques to manage communication apprehension, build self-confidence, and gain command of information.

(3) Communication and collaboration. The student develops a process to effectively communicate with peers, experts, and other audiences about current issues and solutions to global problems. The student is expected to:

(A) demonstrate innovative uses of a wide range of emerging technologies, including online learning, mobile devices, digital content, and Web 2. 0 tools such as podcasting, wikis, and blogs;

(B) participate within appropriate electronic communities as a learner, initiator, and contributor;

(C) extend the learning environment beyond the school walls using appropriate digital tools;

(D) collaborate with a variety of field experts;

(E) prepare for, organize, and participate in an informative or persuasive group discussion with an audience; and

(F) participate appropriately in conversations by making clear requests, giving accurate directions, and asking purposeful questions.

(4) Communication and collaboration. The student uses digital tools to facilitate collaboration and communication in the design, development, and evaluation of products offering solutions to real-world issues. The student is expected to:

(A) design and organize resources to create an effective collaborative working environment that enables a group to investigate a local, state, national, or global issue;

(B) analyze and evaluate effective communication;

(C) demonstrate leadership by managing project activities such as timelines, research, product development, marketing material, and effective communication skills;

(D) demonstrate effective management of diverse peer-group dynamics such as solving problems, managing conflicts, and building consensus; and

(E) evaluate original products for accuracy, validity, and compliance with copyright laws.

(5) Research and information fluency. The student uses a variety of strategies to acquire and evaluate information relating to real-world issues. The student is expected to:

(A) locate authoritative information from primary and secondary sources such as field experts, online full-text databases, or current news databases;

(B) make decisions regarding the selection, acquisition, and use of information gathered, taking into consideration its quality, appropriateness, effectiveness, and level of interest to society; and

(C) demonstrate fluency in the use of a variety of electronic sources such as cloud computing, emerging collaboration technologies, data mining strategies, and mobile or other technologies.

(6) Research and information fluency. The student uses a variety of digital tools to synthesize information related to real-world issues in student-created materials. The student is expected to:

(A) construct real-world informational materials that inform, persuade, or recommend reform of selected issues;

(B) identify and employ a method to evaluate the design, functionality, and accuracy of the student-created materials; and

(C) use effective strategies to organize and outline presentations to support and clarify points.

(7) Critical thinking, problem solving, and decision making. The student uses critical-thinking skills to conduct research, manage products, solve problems, and make informed decisions for real-world local, state, national, and global issues. The student is expected to:

(A) identify and define authentic problems and significant questions for investigation;

(B) design and implement procedures to track trends, set timelines, and review and evaluate progress for project completion;

(C) read and use technical documentation, including appropriate help options, to complete tasks; and

(D) analyze the audience, occasion, and purpose when designing presentations.

(8) Critical thinking, problem solving, and decision making. The student creates a product presenting solutions for real-world local, state, national, and global issues. The student is expected to:

(A) create technology specifications for tasks and rubrics to evaluate products and product quality against established criteria;

(B) resolve information conflicts and validate information by comparing data;

(C) represent diverse perspectives in problem solutions; and

(D) prepare and use visual or auditory aids such as scripts, notes, or digital applications to enhance presentations.

(9) Digital citizenship. The student examines ethical and legal behavior to demonstrate leadership as a digital citizen. The student is expected to:

(A) model safe and ethical use of digital information;

(B) model respect of intellectual property when manipulating, morphing, or editing graphics, video, text, and sound;

(C) use technology applications in a positive manner that supports productivity, collaboration, and continuing education; and

(D) use professional etiquette and protocol in situations such as making introductions, offering and receiving criticism, and communicating with digital tools.

(10) Digital citizenship. The student demonstrates ethical and legal behavior in the creation of student products. The student is expected to:

(A) use collaborative tools and strategies; and

(B) use digital tools to correctly document sources such as in bibliographies or works cited.

(11) Technology operations and concepts. The student makes decisions regarding the selection, acquisition, and use of digital tools in a multimedia classroom/lab, taking into consideration the quality, appropriateness, effectiveness, and efficiency of the tools. The student is expected to:

(A) determine the most appropriate file type based on universally recognized file formats such as portable document format (PDF), text format (TXT), rich text format (RTF), and Joint Photographic Experts Group format (JPEG);

(B) use compression schemes for photo, animation, video, and graphics; and

(C) distinguish among appropriate color, sound, and design principles such as consistency, repetition, alignment, proximity, and ratio of text to white space.

(12) Technology operations and concepts. The student demonstrates knowledge through various cloud and network technologies such as web-based interactive presentations, document sharing, and online scholarly databases. The student is expected to:

(A) use necessary vocabulary related to digital tools;

(B) retrieve and discriminate between authoritative and non-authoritative data sources; and

(C) adopt, adapt, and transfer prior knowledge to multiple situations when retrieving, manipulating, and creating original digital projects.

Source: The provisions of this §130.126 adopted to be effective August 1, 2020, 45 TexReg 4190.

§130.127. Web Game Development (One Credit).

(a) General requirements. Students shall be awarded one credit for successful completion of this course. Recommended prerequisite: Web Design. This course is recommended for students in Grades 11 and 12.

(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 Arts, Audio/Video Technology, and Communications Career Cluster focuses on careers in designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.

(3) Web Game Development will allow students to demonstrate creative thinking, develop innovative strategies, and use digital and communication tools necessary to develop fully functional online games. Web Game Development has career applications for many aspects of the game industry, including programming, art principles, graphics, web design, storyboarding and scripting, and business and marketing. The six strands include creativity and innovation; communication and collaboration; research and information fluency; critical thinking; problem solving, and decision making; digital citizenship; and technology operations and concepts.

(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) Creativity and innovation. The student demonstrates creative thinking, constructs knowledge, and develops innovative products and processes using technology. The student is expected to:

(A) research, evaluate, and demonstrate appropriate design of a web-based gaming site;

(B) illustrate ideas for web artwork from direct observations, experiences, and imagination;

(C) create original designs for web applications; and

(D) demonstrate the effective use of art media to create original web designs.

(2) Communication and collaboration. The student uses digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning experience of others. The student is expected to:

(A) understand and evaluate the use and appropriateness of webinars;

(B) examine, discuss, and summarize interactive online learning environments;

(C) distinguish between distance learning, virtual learning, and online learning;

(D) define and evaluate Voice over Internet Protocol (VoIP);

(E) identify and apply end-user, peer, self-, and professional evaluations; and

(F) work collaboratively to create functioning programs and gaming products.

(3) Research and information fluency. The student applies digital tools to gather, evaluate, and use information. The student is expected to:

(A) research, evaluate, and create web forms for database processing;

(B) identify the various programming languages and differentiate among the available web programming languages;

(C) research, evaluate, and summarize content management systems (CMS);

(D) differentiate between Common Gateway Interface (CGI) and computer-generated imagery (CGI);

(E) discuss, analyze, and summarize streaming media/content and game broadcasting;

(F) define and evaluate instant messaging (IM) within a game environment;

(G) analyze and discuss the history of gaming;

(H) discuss, analyze, compare, and contrast game types such as action, action-adventure, adventure, construction and management simulation, life simulation, massively multiplayer online role-playing (MMORPG), music, party, puzzle, role-playing, sports, strategy, trivia, and vehicle simulation;

(I) discuss, analyze, compare, and contrast gaming hardware, including console, personal computer, mobile, and web;

(J) compare and contrast web standards versus browser-specific languages;

(K) research, evaluate, and summarize e-commerce;

(L) investigate career opportunities in programming, gaming, art, design, business, and marketing;

(M) research the characteristics of existing gaming websites to determine local, state, national, and global trends;

(N) compare and contrast historical and contemporary styles of art as applied to website development;

(O) compare and contrast the use of the art elements of color, texture, form, line, space, and value and the art principles of emphasis, pattern, rhythm, balance, proportion, and unity in personal web game artwork and the web game artwork of others, using vocabulary accurately;

(P) describe general characteristics in artwork from a variety of cultures that influence web game design;

(Q) research and evaluate emerging technologies; and

(R) research and evaluate augmented reality (the supplementing of reality with computer-generated imagery) such as heads-up display and virtual digital projectors.

(4) Critical thinking, problem solving, and decision making. The student uses critical-thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources. The student is expected to:

(A) select an appropriate web programming language based on given criteria;

(B) develop requirements for a database and determine the appropriate means to insert, delete, and modify records;

(C) develop Structured Query Language (SQL) statements to retrieve, insert, modify, and delete records in a database;

(D) design and create a flow diagram to plan a database, program, and game;

(E) define and identify proper use of gaming graphics, including skins, textures, environment appearance, environment mapping, raster graphics, and vector graphics;

(F) plan an animation that includes the movement of characters, camera movements, camera angles, user point of view, mechanics of motion, backgrounds, settings, ambient objects, and environments;

(G) compare and contrast two-dimensional (2-D) and three-dimensional (3-D) animation;

(H) develop and create a gaming storyboard and script that shows the overall development of a storyline;

(I) identify and implement graphic and game design elements, including color, environment, time to completion, difficulty, story complexity, character development, device control, backstory, delivery, and online player(s);

(J) design and create decision trees for a game's artificial intelligence engine;

(K) compare and contrast available audio formats for optimal delivery;

(L) identify the similarities and differences among platforms, including the application of coding on a personal computer, mobile device, and gaming console;

(M) research and identify existing online game development tools;

(N) evaluate and determine network requirements for the delivery of online games to end users; and

(O) create visual solutions by elaborating on direct observation, experiences, and imagination as they apply to original web design.

(5) Digital citizenship. The student understands human, cultural, and societal issues related to technology and practices legal and ethical behavior. The student is expected to:

(A) explain game ratings and why games fit into certain ratings;

(B) assess games and game ratings in terms of their impact on societal interactions;

(C) model the ethical and legal acquisition of digital information following copyright laws, fair-use guidelines, and the student code of conduct;

(D) define and practice the ethical and legal acquisition, sharing, and use of files taking into consideration their primary ownership and copyright;

(E) examine original web game artwork to comply with appropriate behavioral, communication, and privacy guidelines, including ethics, online bullying and harassment, personal security, appropriate audience language, ethical use of files/file sharing, technical documentation, and online communities;

(F) interpret, evaluate, and justify artistic decisions in the creation of original art for web game design; and

(G) analyze original web game artwork and digital portfolios created by peers and others to form precise conclusions about formal qualities, historical and cultural contexts, intents, and meanings.

(6) Technology operations and concepts. The student demonstrates a sound understanding of technology concepts, systems, and operations. The student is expected to:

(A) create a website that includes:

(i) an interactive database with elements such as SQL statements, Extensible Markup Language (XML), and Open Database Connectivity (ODBC);

(ii) JavaScript; and

(iii) server-side processing, including Common Gateway Interface (CGI); bitmap and vector graphics; database creation, modification, and deletion; creation and maintenance of user accounts; user authentication; and documentation;

(B) create a fully functional online game that includes:

(i) multiple game levels with increasing difficulty;

(ii) high-score ranking;

(iii) physics, including center of mass, collision detection, lighting, shading, perspective, anatomy, motion blur, lens flare, and reflections;

(iv) art principles, including color theory, texture, balance, lighting, shading, skinning, and drawing;

(v) graphics resolution, including pixel depth and compression;

(vi) database creation, modification, and deletion;

(vii) creation and maintenance of user accounts;

(viii) user authentication;

(ix) artificial intelligence;

(x) game-level saving;

(xi) mathematical functions;

(xii) varying camera angles;

(xiii) VoIP for online web games; and

(xiv) documentation; and

(C) create a digital portfolio.

Source: The provisions of this §130.127 adopted to be effective August 1, 2020, 45 TexReg 4190.