

PROPOSED REGULATION OF THE STATE BOARD OF EDUCATION

LCB File No. R066-15

Explanation: All matter in *italics* is new. All matter with a ~~strike-through~~ is to be removed.

AUTHORITY: NRS 385.080 & NRS. 385.110

~~{Matter in italics is new; matter with lines to be removed}~~

Proposed Amendments to NAC 389.605 and 389.803
(Non-italicized highlighted sections indicate recent changes; *italicized wording*
represents proposed new language; lined wording represents proposed deletions)

~~{NAC 389.605 — Graphic communications and production. (NRS 385.080, 385.110) — A course of study in graphic communications and production must be designed so that pupils meet the following performance standards by the completion of the final course of instruction:~~

- ~~— 1. For the area of graphic communications and production industry:~~
 - ~~— (a) Understand the importance of the history of that industry;~~
 - ~~— (b) Understand the concept of the workflow process;~~
 - ~~— (c) Understand the types of careers and the prospects for employment available in that industry;~~
 - ~~— (d) Demonstrate an understanding of the principles of entrepreneurship;~~
 - ~~— (e) Demonstrate proficiency in the standard mathematical concepts used in that industry; and~~
 - ~~— (f) Effectively estimate all costs associated with a graphic communications and production project.~~
- ~~— 2. For the area of advertising and design:~~
 - ~~— (a) Demonstrate knowledge of copyright and intellectual property laws related to the graphic communications and production industry;~~
 - ~~— (b) Demonstrate knowledge of typography and its application;~~
 - ~~— (c) Demonstrate various techniques for page layouts using a variety of graphic communications and production applications;~~
 - ~~— (d) Identify and apply the elements and principles of design; and~~
 - ~~— (e) Understand the importance of selecting a substrate as it relates to design.~~
- ~~— 3. For the area of creation of a digital file:~~
 - ~~— (a) Demonstrate and use standard software applications of the graphic communications and production industry for design;~~
 - ~~— (b) Compare and contrast a variety of file formats and their uses and applications;~~
 - ~~— (c) Understand and use various techniques for capturing digital images;~~
 - ~~— (d) Understand how to create a digital image;~~
 - ~~— (e) Understand how to use portable document format files; and~~

- ~~—(f) Use the appropriate software to preflight files.~~
- ~~—4. For the area of sending digital files to output devices:~~
 - ~~—(a) Identify, select and operate the appropriate output device;~~
 - ~~—(b) Describe and apply imposition techniques;~~
 - ~~—(c) Perform basic maintenance on output devices; and~~
 - ~~—(d) Demonstrate knowledge of digital production printing.~~
- ~~—5. For the area of offset press operations:~~
 - ~~—(a) Identify and perform offset press operations;~~
 - ~~—(b) Explain the functions of a lithographic plate;~~
 - ~~—(c) Identify and explain the basic systems of an offset press;~~
 - ~~—(d) Perform proper make-ready procedures;~~
 - ~~—(e) Differentiate between the uses of single-color and multi-color printing presses; and~~
 - ~~—(f) Demonstrate the proper maintenance procedures for offset presses.~~
- ~~—6. For the area of screen print technology:~~
 - ~~—(a) Understand and demonstrate the processes of screen print technology and the production of screen prints;~~
 - ~~—(b) Understand frames and the processes of screen preparation;~~
 - ~~—(c) Select and apply the appropriate stencil system;~~
 - ~~—(d) Print a substrate using proper screen printing techniques; and~~
 - ~~—(e) Practice the proper procedures for cleanup and maintenance.~~
- ~~—7. For the area of binding and finishing operations and equipment, understand the appropriate procedures for binding.~~
- ~~—8. For the area of environmental health, safety and first-aid procedures:~~
 - ~~—(a) Identify and follow appropriate environmental health, safety and first-aid procedures;~~
 - ~~—(b) Demonstrate knowledge of the requirements and opportunities that are available for recycling and reusing in the community in which the pupil lives;~~
 - ~~—(c) Understand the laws and regulations governing the graphic communications and production industry, including, without limitation, local laws and regulations, and any rules or regulations of the United States Environmental Protection Agency and the Occupational Safety and Health Administration of the United States Department of Labor;~~
 - ~~—(d) Demonstrate knowledge of material safety data sheets;~~
 - ~~—(e) Understand the emergency procedures of the classroom and the school in which the pupil is enrolled, including, without limitation, the applicable emergency plan; and~~
 - ~~—(f) Demonstrate the proper use of personal protective equipment.~~
- ~~—(Added to NAC by Bd. of Education by R024-12, eff. 9-14-2012)}~~

Section 1. NAC 389.803 is hereby amended to read as follows:

389.803 1. The board of trustees of a school district may offer any of the following program areas for a program of career and technical education in a public high school:

- (a) Agriculture and natural resources, which may include the following courses of study:
 - (1) ~~{Agriculture}~~ *Agricultural* business systems.
 - (2) Agricultural leadership, communication and policy.
 - (3) ~~{Agriculture-mechanical-engineering-technology-equipment-fabrication-systems.~~
 - (4) ~~Agriculture-mechanical-engineering-technology-power-systems.~~
 - (5) ~~Agriculture-mechanical-engineering-technology-structural-systems.}~~ *Agricultural mechanics technology.*
 - ~~{(6)}~~ (4) Animal science.

- ~~[(7)]~~ (5) Environmental management.
- ~~[(8)] Equine science.~~
- ~~[(9)]~~ (6) Floriculture design and management.
- (7) *Food Science Technology.*
- ~~[(10)]~~ (8) Landscape design and management.
- ~~[(11)]~~ (9) Natural resources and wildlife management.
- ~~[(12)]~~ (10) Ornamental horticulture ~~for~~ / greenhouse management.
- ~~[(13)]~~ (11) Veterinary science.
- (b) Business and marketing education, which may include the following courses of study:
 - (1) Accounting and finance.
 - (2) Administrative services.
 - (3) Business management.
 - (4) Entrepreneurship.
 - (5) Marketing.
 - (6) Sports and entertainment marketing.
- (c) Education, hospitality and human services, which may include the following courses of study:
 - (1) Baking and pastry.
 - (2) Cosmetology.
 - (3) Culinary arts.
 - (4) Early childhood education.
 - (5) Family and consumer sciences.
 - (6) Foods and nutrition.
 - (7) Hospitality and tourism.
 - (8) Human development.
- (d) Health science and public safety, which may include the following courses of study:
 - (1) Biomedical.
 - (2) Criminal justice.
 - (3) Dental assisting.
 - (4) Emergency medical technician.
 - (5) Emergency telecommunications.
 - (6) Fire science.
 - (7) Forensic science.
 - (8) Health information management.
 - (9) Law enforcement.
 - (10) Medical assisting.
 - (11) Nursing assistant.
 - (12) Pharmacy ~~technician~~ *practice.*
 - (13) Respiratory therapy.
 - (14) Sports medicine.
- (e) Information and media technologies, which may include the following courses of study:
 - (1) Animation.
 - (2) Computer science.
 - (3) ~~Database design.~~
 - ~~[(4)]~~ Digital game development.
 - ~~[(5)]~~ (4) Fashion, textiles and design.

- ~~{(6)}~~ (5) Graphic design.
- ~~{(7)}~~ ~~Graphic communications and production.~~
- ~~{(8)}~~ ~~Housing and interior design.~~ (6) *Interior design.*
- ~~{(9)}~~ (7) Information technology for networking.
- ~~{(10)}~~ (8) Information technology for service and support.
- ~~{(11)}~~ (9) Photography.
- ~~{(12)}~~ (10) Radio production.
- ~~{(13)}~~ (11) ~~Theater~~ *Theatre* technology.
- ~~{(14)}~~ (12) Video production.
- ~~{(15)}~~ (13) Web design and development.

(f) Skilled and technical sciences, which may include the following courses of study:

- (1) Aerospace engineering.
- (2) ~~{(Aircraft equipment technology.)}~~
- ~~{(3)}~~ Architectural and civil engineering.
- ~~{(4)}~~ (3) Architectural ~~{(drafting and)}~~ design.
- (4) *Automotive service technician.*
- (5) Automotive technology.
- (6) *Aviation maintenance technician.*
- (7) Aviation technology.
- ~~{(7)}~~ ~~Biotechnical engineering.~~
- (8) Collision repair technology.
- (9) Construction technology.
- (10) Diesel ~~{(equipment)}~~ technology.
- (11) Drafting and design.
- (12) ~~{(Electronic)}~~ *Electrical* engineering.
- (13) Electronic technology.
- (14) Energy technologies.
- (15) *Environmental engineering.*
- (16) Furniture and cabinetmaking.
- ~~{(16)}~~ (17) Heating, ventilation, air-conditioning and refrigeration.
- ~~{(17)}~~ (18) Machine tool technology.
- ~~{(18)}~~ ~~Mechanical drafting and design.~~
- (19) *Manufacturing technologies.*
- (20) Mechanical engineering.
- ~~{(20)}~~ (21) Mechanical technology.
- ~~{(21)}~~ (22) Metalworking.
- ~~{(22)}~~ (23) Welding technology.

2. If the board of trustees of a school district offers a program area set forth in subsection 1, the courses of study which the board of trustees offers within that program area must comply with the standards of content and performance established by the State Board of Education for that course of study if the Board has established such standards. A copy of any standards of content and performance that the Board has established for those courses of study are available on the website maintained by the Department of Education at the Internet address http://ctae.nv.gov/Career_and_Technical_Education/Standards/.