

**ADOPTED REGULATION OF THE  
STATE BOARD OF EDUCATION**

**LCB File No. R055-06**

Effective August 31, 2007

EXPLANATION – Matter in *italics* is new; matter in brackets ~~[omitted material]~~ is material to be omitted.

AUTHORITY: §1, NRS 385.080 and 385.110.

A REGULATION relating to education; prescribing performance standards for a course of study in furniture and cabinetmaking; and providing other matters properly relating thereto.

**Section 1.** NAC 389.614 is hereby amended to read as follows:

389.614 A course of study in *furniture and* cabinetmaking must ~~[include instruction~~

~~designed to teach the pupil to do the following:~~

~~—1.— Read blueprints.~~

~~—2.— Estimate the need for materials.~~

~~—3.— Use portable electric tools and stationary equipment such as a shaper, planer, radial saw, jointer, sander and machines for dowling.~~

~~—4.— Design, layout, build, finish and install cabinets.~~

~~—5.— Apply a finish to a cabinet.]~~ *be designed so that pupils meet the following performance*

*standards by the completion of an advanced program of instruction:*

*1. For the area of safety, demonstrate safe work practices and use of equipment and tools while performing operations in the work environment by:*

*(a) Adhering to general shop and site safety rules for:*

*(1) Personal protective wear;*

- (2) The safe handling, storage and disposal of hazardous materials;*
- (3) Awareness of the potential hazards to oneself and to other persons;*
- (4) Adherence to construction-related safety practices; and*
- (5) Administration of basic first-aid treatment.*

*(b) Adhering to safe work practices in the maintenance and use of hand and power tools, including:*

- (1) The safe use and care of hand tools;*
- (2) The safe operation of stationary power tools;*
- (3) Basic maintenance of hand and power tools;*
- (4) The proper operation of pneumatic tools; and*
- (5) The proper inspection of power tools to ensure that the guards, shields, insulation and other protective devices are properly placed and functioning.*

*2. For the area of mathematics, apply mathematics for practical use in furniture and cabinetmaking by:*

*(a) Estimating the needs and costs for materials by using board-, square- and linear-foot measurements; and*

*(b) Demonstrating how to properly square corners and accurately measure to 1/32 inch and to the nearest millimeter.*

*3. For the area of project planning, demonstrate competence in the planning, design and blueprint reading necessary for furniture and cabinetmaking by:*

*(a) Understanding the elements and principles of design;*

*(b) Identifying the various kitchen, furniture and cabinet styles used in the furniture and cabinetmaking industry;*

*(c) Demonstrating competence in various drafting techniques and blueprint reading used in the furniture and cabinetmaking industry;*

*(d) Interpreting and applying information to develop or evaluate a bill of materials;*

*(e) Estimating the quantity and cost of materials; and*

*(f) Developing a plan of procedures necessary to complete a project.*

*4. For the area of tool selection and usage, demonstrating the proper use of:*

*(a) Measuring and layout tools;*

*(b) Cutting tools;*

*(c) Striking tools;*

*(d) Hand-boring tools;*

*(e) Hand-shaping tools; and*

*(f) Clamping tools.*

*5. For the area of power tool selection and usage, demonstrating the proper and safe use of:*

*(a) Portable power tools; and*

*(b) Stationary power tools.*

*6. For the area of joinery, demonstrate competence in the use of joinery techniques, fasteners and adhesives by:*

*(a) Demonstrating a working knowledge of the various metallic fasteners used in the furniture and cabinetmaking industry;*

*(b) Identifying and using various dowels and biscuits used in the furniture and cabinetmaking industry;*

*(c) Identifying and using various adhesives used in the furniture and cabinetmaking industry; and*

*(d) Identifying and constructing various wood joints used in the furniture and cabinetmaking industry.*

*7. For the area of wood products and materials, demonstrate knowledge in the identification, characteristics and uses of commonly used wood products and materials by:*

*(a) Identifying various hardwoods and softwoods;*

*(b) Identifying various sheet goods and describing their characteristics and uses;*

*(c) Identifying various solid surface and laminate materials and describing their characteristics and uses; and*

*(d) Identifying various veneers and describing their characteristics and uses.*

*8. For the area of construction processes, demonstrate an understanding of various construction processes used in the furniture and cabinetmaking industry by:*

*(a) Demonstrating furniture construction techniques, including case, frame and panel, and leg and rail construction;*

*(b) Demonstrating cabinet construction techniques, including face frame case, frameless case, cabinet drawer and cabinet door construction;*

*(c) Demonstrating manufacturing and mass production techniques;*

*(d) Selecting and installing various hardware used in the furniture and cabinetmaking industry; and*

*(e) Demonstrating various plastic laminating techniques.*

*9. For the area of finishing, prepare a project and apply finishes in accordance with the standards of the furniture and cabinetmaking industry by:*

- (a) Properly using various abrasives to prepare a project for a finish;*
- (b) Selecting and applying various stains;*
- (c) Identifying and applying various sealers and finish coats; and*
- (d) Identifying and applying various fillers.*

*10. For the area of installation, transport and install furniture and cabinets in accordance with the standards of the furniture and cabinetmaking industry by demonstrating:*

- (a) Proper techniques for packaging and transporting furniture and cabinets;*
- (b) The proper layout and installation of cabinets;*
- (c) The proper layout, fabrication and installation of countertops; and*
- (d) The proper layout and installation of molding and trim.*

*11. For the area of skills necessary to obtain employment, demonstrating:*

- (a) Skills necessary for solving problems;*
- (b) Skills of critical thinking;*
- (c) The ability to speak, write and listen effectively;*
- (d) The ability to select, apply and maintain appropriate technology;*
- (e) Skills of leadership and teamwork;*
- (f) An awareness of the ethical behavior appropriate for the workplace;*
- (g) The ability to effectively manage resources in high-performance workplaces;*
- (h) Skills necessary for the planning and development of a career; and*
- (i) Skills necessary for retaining a job and the continuation of learning throughout a career.*

**NOTICE OF ADOPTION OF PROPOSED REGULATION**  
**LCB File No. R055-06**

The State Board of Education adopted regulations assigned LCB File No. R055-06 which pertain to chapter 389 of the Nevada Administrative Code.

**INFORMATIONAL STATEMENT**

The following statement is submitted for adopted amendments to Nevada Administrative Code 391:

1. A description of how public comment was solicited, a summary of public response, and explanation how other interested persons may obtain a copy of the summary.

Notice of Workshop to Solicit Comments on Proposed Regulations was sent to approximately 200 individuals and educational organizations. A workshop was held on March 24, 2006. There was public comment.

The Notice of Intent to Act Upon a Regulation for public hearing and adoption of the amendments to NAC 389.614 – Cabinetmaking was sent to approximately 200 individuals and educational organizations. The public hearing was conducted on April 29, 2006 to provide the opportunity for comments by affected parties and the public. There was no public comment. The Nevada State Board of Education/Nevada State Board for Career and Technical Education adopted the proposed amendments to the regulation.

2. The Number of Persons Who:

- a) Attended Each Hearing: First Workshop: 7; First Hearing: 7; Second Hearing: N/A
- b) Testified at Each Hearing: First Workshop: 1; First Hearing: 0; Second Hearing: N/A
- c) Submitted Written Statements: First Workshop: 0; First Hearing: 0; Second Hearing: 0

A copy of any written comments may be obtained by calling Doris Arnold, Executive Assistant to the Nevada State Board of Education/Nevada State Board for Career and Technical Education, Nevada Department of Education, 775-687-9217, or by writing to the Nevada Department of Education, 700 East Fifth Street, Carson City, Nevada 89701-5096.

3. A description of how comment was solicited from affected businesses, a summary of the response and an explanation how other interested parties may obtain a copy of the summary.

Comments were solicited through the workshop notice of March 24, 2006; and the public hearing notice of March 24, 2006. At the April 29, 2006 Workshop to Solicit Comments, there was public comment to the proposed amendments to the regulation language. At

the April 29, 2006 public hearings there were public comments to the proposed amendments to the regulation language.

Summary of Comments:

Workshop/Public Hearing Comments:

Workshop comments:

- (a) Sandi Foster, Washoe County School District, expressed support for the proposed regulations.

Public Hearing comments:

There were no public hearing comments.

A copy of the summary and/or minutes of the public hearing may be obtained by calling Doris Arnold, Executive Assistant to the Nevada State Board of Education/Nevada State Board for Career and Technical Education, Nevada Department of Education, 775-687-9217, or by writing to the Nevada Department of Education, 700 East Fifth Street, Carson City, Nevada 89701-5096.

- 4. If the regulation was adopted with or without change to any part of the proposed regulation, a summary of the reasons for adopting.

The Nevada State Board of Education adopted the proposed amendments to the regulation language at the public hearing held April 29, 2006. The reason for adopting the regulation is to establish current state skill standards for Furniture and Cabinetmaking to update the existing course of study requirements for cabinetmaking which is outdated.

- 5. The estimated economic effect of the adopted regulation on the business that it is to regulate and on the public. These must be stated separately and each case must include:

The economic impact on school districts is negligible, since the districts revise existing curriculum periodically. The development of state skill standards has been widely supported by school districts. There is no anticipated economic effect of the regulation on the business that the agency regulates and there are no known adverse effects. There are no adverse, immediate or long term affects on the State Board of Education or the Department of Education. There are no beneficial, immediate and long term affects on the state, school district, and schools

There is no estimated economic effect on the public, either adversely or beneficially, nor immediate or long term.

- 6. The estimated cost to the agency for enforcement of the adopted regulation.

There is no additional cost to the agency for enforcement of this regulation.

7. A description of any regulations of other state or governmental agencies which the proposed regulation overlaps or duplicates and a statement explaining why the duplication or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.

No other state or governmental agency regulations will be overlapped or duplicated by the above noted regulation. There is no duplication or overlap of federal regulations.

8. If the regulation includes provisions which are more stringent than a federal regulation, which regulates the same activity, a summary of such provisions.

There are none.

9. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.

This regulation does not provide for a new fee or increase an existing fee.