



Discipline: Building and Construction Trades
Date Submitted: January 10, 2023

Cerritos College
ARTICULATION AGREEMENT

<p>Cerritos College Course: WMT 100 –Woodworking Essentials (2 units)</p> <p>Cerritos College 11110 Alondra Blvd. Norwalk, CA 90650</p>	<p>High School Course: Furniture Design, History, & Construction 2A/B</p> <p>Corona High School 1150 W 10th St. Corona, CA 92882</p>
<p>General Course Description: This course reviews fundamentals of woodworking and covers the styles of furniture design. Students design and plan an industrial woods product. This is a second-year course that takes the major woodworking machines and covers use of special set up and operations related to industrial procedures. The student applies the knowledge and theory learned in Industrial Wood 1A/1B in the construction of a student learning product. Theory and practice in the correct use and procedures of industrial coatings are taught with an emphasis on spray equipment, various stains, lacquers, synthetic materials, and hand-rubbed oil finishes.</p>	
<p>College Prerequisite(s): N/A</p>	<p>HS Prerequisite(s) Industrial Wood 1A/1B or Introduction to Woodworking 1A/1B</p>
<p>Advisories/Recommendations: N/A</p>	
<p>Course Content:</p> <ul style="list-style-type: none"> I. Orientation <ul style="list-style-type: none"> a. Expectations b. Rules: classroom and school c. General shop safety II. Hand Tools <ul style="list-style-type: none"> a. Safety b. Identification c. Use and care III. Machine Tools and Portable Power Tools <ul style="list-style-type: none"> a. Correct operation b. Nomenclature c. Squaring stock procedure IV. Product Selection and Design <ul style="list-style-type: none"> a. Furniture styles and periods b. Product ideas 	

- c. Design
- d. Sketching
- e. Working drawings and sectional views
- f. Bill of materials
- g. Joint detail drawing
- h. Plan of procedures
- i. Materials

V. Construction of Learning Products

- a. Squaring stock
- b. Cutting joints
- c. Special shapes
- d. Dry assembly
- e. Subassembly

I. Completion of learning product.

- a. Surface preparation
- b. Finishing

II. Types of Construction

- a. Door
- b. Drawers
- c. Case
- d. Leg and rail
- e. Sub-system assembly

III. Specialty Machines

- a. Shaper
- b. Horizontal boring
- c. Panel router
- d. Table saw cuts (specialty cuts)
 - i. Dado
 - ii. Rabbit
 - iii. Groove
 - iv. Cove

IV. Wood Finishing

- a. Surface preparation
- b. Stains
- c. Filler
- d. Top coats
- e. Spray equipment
- f. Rubbing out procedures
 - i. Lacquer
 - ii. Oil
- g. Hand-rubbed oil

Competencies and Skill Requirements.

At the conclusion of this course, the student should be able to:

- Demonstrate competence in planning, design, layout, and technical drawing interpretation for practical use in cabinetmaking and millwork.
- Differentiate between the various furniture and cabinet styles used in the cabinet and furniture industry.
- Interpret and apply information to develop a bill of materials, estimate the cost of materials, and develop a plan of procedures to complete a project.
- Demonstrate proper selection and use of woodworking tools.
- Identify wood products and materials used in the furniture and cabinetmaking industry and describe their characteristics and uses.
- Compare and contrast the advantages and disadvantages of using laminates versus using veneers.
- Demonstrate competence in various construction processes in the cabinetmaking, furniture making, and millwork industries.
- Utilize appropriate abrasives to prepare a project for a specific finish.
- Understand finishes and when to apply paint, stains, sealers, varnishes, and catalyzed finishes, including water- and oil-based finishes.
- Use measurement tools common to the woodworking trades.
- Use planer, jointer and table saw to surface solid wood.
- Create common wood joinery with hand and power tools.
- Use cordless tools for construction and assembly.
- Construct case goods and cabinets using panel products.
- Calculate material requirements.
- Demonstrate critical thinking skills through the completion of woodworking projects.

Measurement Methods (quizzes, tests, homework assignments, etc.):

1. Lab work
2. Written Assignments
3. Textbook Questions
4. Written Exam
5. Portfolio

Textbooks or Other Support Materials:

Textbook – Modern Cabinetmaking by William D. Umstatted

Procedures for Course Articulation:

Cerritos College credit for the articulated course listed above may be received when the following criteria are met:

1. Student has completed the articulated course listed above, *Furniture Design, History, & Construction 2A/B* with a grade of “B” or higher.
2. Student must take and pass the WMT 100 final exam (provided by Cerritos College) with a score of 85% or higher.
3. Student must enroll at Cerritos College within two (2) years from the semester date in which the course was completed.
4. Student will complete and submit the Cerritos College *Petition for Credit by Examination for Articulated High School Course* form to the Office of Educational Partnerships & Programs at Cerritos College.
5. A maximum of 30 units may be awarded through credit by examination.

This Agreement will be reviewed annually and will remain in effect until cancelled by either party giving 30 days written notice.

High School/ROP District Signatures

Cerritos College Signatures

<u><i>Kyle Whittenburg</i></u> <small>Kyle Whittenburg (Jan 12, 2023 07:23 PST)</small>	Jan 12, 2023	<u><i>Renée J. Ford</i></u>	Feb 14, 2023
Faculty/Department Chair	Date	Instructor/Division Chair	Date
<u><i>Ben Sanchez</i></u> <small>Ben Sanchez (Jan 18, 2023 15:48 PST)</small>	Jan 18, 2023	<i>Nick Real, Ed.D.</i>	Feb 14, 2023
Principal	Date	Dean of Instruction	Date
<u><i>Samuel Buenroastro</i></u> <small>Samuel Buenroastro (Feb 14, 2023 13:04 PST)</small>	Feb 14, 2023	<u><i>Wei Zhou</i></u> <small>Wei Zhou (Feb 14, 2023 15:41 PST)</small>	Feb 14, 2023
Superintendent	Date	Vice President	Date