

Discipline: Building Trades and Construction
Date Submitted: May 26, 2023

# Cerritos College Articulation Agreement

Cerritos College Course:

WMT 100 – Woodworking Essentials (2 units)

Cerritos College 11110 Alondra Blvd. Norwalk, CA 90650 **High School Course:** 

**Woodworking Machine Operation** 

California High School 9800 Mills Ave. Whittier, CA 90604

## **General Course Description:**

This competency-based course is the last in a sequence of three designed for carpentry. It provides students with technical instruction and practical experience in woodworking machine operation using sustainable and green technology. Instruction includes an introduction, workplace safety, reviews of resource management and employability skills, trade mathematics, the use/maintenance/storage of woodworking tools, machines, and equipment, an overview of the apprenticeship program, and basic entrepreneurial skills. Emphasis is placed on surface preparation, lacquer application, lamination construction, high- pressure laminations, estimation, and production techniques. The competencies in this course are aligned with the California High School Academic Content Standards and the California Career Technical Education Model Curriculum Standards. Integrated throughout the course are standards for Career Ready Practice and Academic Content Standards which include: appropriate technical skills and academic knowledge; communication skills; career planning; applied technology; critical thinking and problem solving; personal health and financial literacy; citizenship, integrity, ethical leadership and effective management; work productively while integrating cultural and global competence; creativity and innovation; reliable research strategies, and environment, social and economic impacts of decisions.

College Prerequisite: None HS/ROCP Prerequisite: None

Advisories/Recommendations: None

#### **Course Content:**

I. ORIENTATION AND SAFETY

- Review, apply, and evaluate classroom and workplace policies and procedures used in accordance with federal, state, and local safety and environmental regulations.
- II. RESOURCE MANAGEMENT
  - Review, apply, and evaluate the basic principles of resource management in the bench carpentry business.
- III. TRADE MATHEMATICS
  - Understand, apply, and evaluate the mathematical requirements in construction carpentry.
- IV. TOOLS, MACHINES, AND EQUIPMENT
  - Understand, apply, and evaluate the various types of machines in the wood working shop, their major uses, and safe handling.

#### V. SURFACE PREPARATION

 Understand, apply, and evaluate the techniques for preparing a surface of wood for proper application of lacquer finish.

#### VI. LACQUER APPLICATION

 Understand, apply, and evaluate the techniques used in applying lacquer to a properly prepared wood surface.

#### VII. LAMINATION CONSTRUCTION

 Understand, apply, and evaluate the techniques for producing a laminated curved product utilizing at least five laminations of wood.

# VIII. HIGH PRESSURE LAMINATION

• Understand, apply, and evaluate the techniques for applying a laminate to an edge and to a surface.

#### IX. ESTIMATION

 Understand, apply, and evaluate the techniques for estimating the manufacturing production costs for 1000 units of a simple product as assigned.

#### X. PRODUCTION TECHNIQUES

• Understand, apply, and evaluate the techniques for planning and executing a production schedule for mass producing a small wooden toy.

#### XI. EMPLOYABILITY SKILLS REVIEW

 Review, apply, and evaluate the employability skills required in a woodworking machine operation.

#### XII. ENTREPRENEURIAL SKILLS

• Understand, apply, and evaluate the process in becoming an entrepreneur.

## XIII. APPRENTICESHIP PROGRAM

Understand, apply, and evaluate the carpentry apprenticeship program policies and procedures

# Competencies and Skill Requirements.

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

Upon completion of this course, the student shall acquire the knowledge, skills, and demonstrated competencies necessary to obtain in-house Safety Certifications on all applicable Power tools. The student will be able to seek and potentially find entry-level employment in the construction field. Students will obtain safety clearance and performance levels on all applicable shop tools for the duration of the course. Students will know the mathematical formulas involved in the production of a prescribed project from start to finish.

## **Measurement Methods:**

- Daily class work
- Quizzes / Exams
- Projects
- Notebook
- Portfolio
- Classroom participation
- Safe and proper use or operation of tools, machinery, and equipment

# **Textbooks or Other Support Materials:**

- Close-toed shoes
- Pencil(s)
- 3-Ring binder (for class notebook)

- Calculator
- Paper
- Hearing protection (Ear plugs or Earmuffs)
- Dust Mask
- Tape measure
- Personal safety glasses

## **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, *Woodworking Machine Operation* 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	
Charles Lee Charles Lee (May 31, 2023 12:13 PDT)	May 31, 2023	Renbe J. Foot	Oct 11, 2023
Faculty/Department Chair	Date	Instructor/Division Chair	Date
John Smith John Smith (Oct 10, 2023 13:28 PDT)	Oct 10, 2023	Yannick Red (Oct 12, 2023 07:06 PDT)	Oct 12, 2023
Principal	Date	Dean of Instruction	Date
Jol Smith (Jun 13, 2023 23:21 PDT)	Jun 13, 2023	WIIII	Oct 17, 2023
Superintendent	Date	Vice President	Date