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| **COURSE INTRODUCTION:**  This course utilizes welding in the development and construction of major metal and wood projects. (CD 016770, CIP 01.0201).    Course Rationale – Agriculture encompasses the food, fiber, conservation and natural resource systems, employing over 20% of the nation’s workforce. Advanced skills in welding, woodworking, and project construction provide students with entry-level agricultural construction skills. |

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| **UNIT DESCRIPTION:**  Students will learn to properly and safely use hand and power woodworking tools, as well as learn to properly select materials for construction projects. | | | **SUGGESTED UNIT TIMELINE: 1 Week**  **CLASS PERIOD (min.): 50 MINUTES** | | | | | |
| **ESSENTIAL QUESTIONS:**  **1. How do you properly and safely use hand and power woodworking tools?**  **2. How do you properly select materials for specific construction projects?** | | | | | | | | |
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| **ESSENTIAL MEASURABLE LEARNING OBJECTIVES** | | **CCSS LEARNING GOALS (Anchor Standards/Clusters)** | | **CROSSWALK TO STANDARDS** | | | | |
| **GLEs/CLEs** | **PS** | **CCSS** | **AFNR Standards** | **DOK** |
| 1. Distinguish common woods used in agricultural construction. | |  | |  |  | RST11-12.4  RST11-12.9  L11-12.6 | PST.04.01  PST.04.02 | **2** |
| 1. Select the proper fastener for a specific job. | |  | |  |  |  | CS.08.01  PST.01.03  PST.02.01  PST.02.02 | **2** |
| 1. List the actual and nominal dimensions of common construction lumber. | |  | |  |  | N-Q-1  N-Q-2  N-Q-3  RST11-12.9  WHST11-12.2 | PST.04.01  PST.04.02 | **1** |
| 1. Use hand woodworking tools. | |  | |  |  |  | CS.08.01  CS.08.02  CS.08.03  PST.01.03  PST.02.01  PST.02.02 | **2** |
| 1. Use power woodworking tools. | |  | |  |  |  | CS.08.01  CS.08.02  CS.08.03  PST.01.03  PST.02.01  PST.02.02 | **2** |
| 1. Select preservatives. | |  | |  |  |  | CS.08.01  CS.08.02  CS.08.03 | **2** |
| 1. Apply basic woodworking skills to make an appropriate woodworking project. | |  | |  |  | N-Q-1  N-Q-2  N-Q-3  G-CO-6  G-CO-7  G-CO-12  G-MG-1  G-MG-3  G-GMD-4  RST11-12.3  RST11-12.4  RST11-12.9  L11-12.6 | CS.06.03  CS.07.01  CS.07.04  CS.08.01  CS.08.02  CS.08.03  PST.01.03  PST.02.01  PST.02.02  PST.04.01  PST.04.02 | **4** |
| **ASSESSMENT DESCRIPTIONS\*: (Write a brief overview here. Identify Formative/Summative. Actual assessments will be accessed by a link to PDF file or Word doc. )**  Students will use common woodworking tools to lay out, cut, drill, and dress a board.  Assessment will be based on the overall quality of the work and the ability to safely and correctly complete the project within the available time.  **\*Attach Unit Summative Assessment, including Scoring Guides/Scoring Keys/Alignment Codes and DOK Levels for all items. Label each assessment according to the unit descriptions above ( i.e., Grade Level/Course Title/Course Code, Unit #.)** | | | | | | | | |
| **Obj. #** | **INSTRUCTIONAL STRATEGIES (research-based): (Teacher Methods)** | | | | | | | |
| 1-6 | **1. Lecture and demonstration** | | | | | | | |
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| **Obj. #** | **INSTRUCTIONAL ACTIVITIES: (What Students Do)** | | | | | | | |
| 1-6 | 1. Students will engage in study questions in lessons 1 through 6. | | | | | | | |
| 7 | 1. Students will complete “JS 5.1, Using a Shaper”; “JS 5.2, Using a Router”; “JS 5.3, Using a Power Miter Box Saw”; “JS 5.4, Using a Reciprocating Saw”; and “JS 5.5, Using a Scroll Saw.” | | | | | | | |
|  | 1. Additional activities that relate to the unit objective can be found under the heading “Other Activities” in the following locations:  p. III-5 (1, 2), p. III-18 (1, 2, 3), p. III-27 (1), p. III-29 (2, 3), p. III-36 (1), and p. III-64 (1) | | | | | | | |
| **UNIT RESOURCES: (include internet addresses for linking)**   * *Agricultural Construction Volume II*. University of Missouri-Columbia, Instructional Materials Laboratory, 1989. www.mcce.org * *Agricultural Mechanics Building Plans*. University of Missouri-Columbia, Instructional Materials Laboratory, 1994. www.mcce.org * *Agricultural Mechanics Plans (Set)*. University of Missouri-Columbia, Instructional Materials Laboratory. www.mcce.org | | | | | | | | |