# **Anoka-Hennepin Secondary Curriculum Unit Plan**

Department:	Career Technical Education	Course:	Construction Careers: Carpentry	Unit 6 Title:	Shingles and Shingling	Grade Level(s):	11-12
Assessed Trimester:	Α	Pacing:	1-2 Days	Date Created:	1/17/2014	Last Revision Date:	

## Course Understandings: Students will understand that:

- The field of construction trades and its area of specialization.
- Organizational skill, problem solving, critical thinking, and assessment skills are the essential tools used in construction trades.
- Math, in its various forms, are foundational to the construction trades.
- Attention to detail, resulting in a safe work environment and a high quality product, is the driving force within construction trades.

# DESIRED RESULTS (Stage 1) - WHAT WE WANT STUDENT TO KNOW AND BE ABLE TO DO?

### **Established Goals**

## Minnesota State/Local/Technology Standard(s) addressed:

- **Professional Attributes** A1 Displays high standards for attendance and punctuality, A2 Displays a positive attitude, A3 Displays appropriate behavior, A4 Works effectively as a team member, A5 Applies listening skills, A6 Applies speaking skills
- Fundamental Carpentry Skills E9 Uses squares, measuring tapes or rules to measure materials or distances, E11 Performs mathematical calculations
- Hand Tools F1 Identifies and correctly uses hammers, F2 Identifies and correctly uses handsaws
- Power Tools G1 Identifies and correctly uses power drills, G2 Identifies and correctly uses power saws, G3 Identifies and correctly uses sanders, G7 Identifies and correctly uses pneumatic nailer
- Reading Plans H4 Reads and interprets elevation view drawings
- **Estimating Materials** J3 Estimates roofing materials
- Installing Roof Components M1 Installs roofing felt, M5 Installs fiberglass shingles, M7 Installs main and hip ridge caps using fiberglass shingles
- Installing Exterior Finishes N2 Installs box cornices, N3 Installs rake cornices, N5 Installs wood or vinyl fascia, N8 Installs outside corner wood, shingle or siding, N9 Installs selected types of wood siding

### **Transfer**

# Students will be able to independently use their learning to: (product, high order reasoning)

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### Meaning

# Unit Understanding(s): Students will understand that: Shingles and shingling has specific terminology Roof material estimating requires specific calculations Proficiency with specific tools is required to install shingles and shingling There are numerous types of shingles used in construction trades Specific procedures are required for the installation of shingles What is shingles? How is math utilized in estimating shingles? What types of shingles are there? What safety measures need to be followed in installing shingles?

## Acquisition

## Knowledge - Students will:

- Know shingles and shingling terminology
- Know shingle installation

## Skills - Students will:

- Mark placement of the first shingle
- Explain installation procedure for shingles

<ul> <li>Know safety protocol for shingle installation and specific tools</li> <li>Know size and cost estimates for different types of shingles</li> <li>Know the different types of shingles</li> <li>Know the different types of fasteners for shingles</li> <li>Reasoning - Students will:</li> </ul>	<ul> <li>Demonstrate safety procedures for installation of shingles</li> <li>Calculate accurate estimate for shingling materials</li> <li>Explain the characteristics and function of different types of shingles</li> </ul>
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Common Misunderstandings	Essential new vocabulary
Inability to do math	•
Illiteracy in either or both reading and writing	
Where to start installation of sheathing and siding	
Type of fasteners and their role	