South Central College

CARP 2030  Advanced Principles II

Course Outcome Summary

Course Information

Description  Advanced Principles II is the continuation of the house project. Trusses will be set, the roof sheathed and shingled. Windows and doors will be installed along with house wrap. Students will be insulating the house and installing drywall. This is a big part of the program and all students will be expected to work as a team. (Prerequisites: CARP 1110; CARP 1121)

Total Credits  5
Total Hours  144

Types of Instruction

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Pre/Corequisites

CARP 1110 Carpentry Tools and Safety
CARP 1121 Print Reading

Institutional Core Competencies

Communication - Students will be able to demonstrate appropriate and effective interactions with others to achieve their personal, academic, and professional objectives.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Competencies

1. **Install wind wash.**
   - Learning Objectives
   - Relate the importance of wind wash.
   - Measure and cut individual pieces.
   - Convey the importance of the one inch gap, fasten wind wash.

2. **Apply backing.**
Learning Objectives
Summarize the importance of backing.
Visualize where backing is needed.
Fasten appropriate backing.

3. **Install truss bracing.**

   Learning Objectives
   Utilize truss drawings.
   Insert appropriate stock and nail.
   Add "T" braces according to plan.

4. **Pass framing inspection.**

   Learning Objectives
   Build according to plan.
   Assemble the house to code.
   Meet building officials' expectations.

5. **Install wall insulation.**

   Learning Objectives
   Describe different insulation materials.
   Install batt insulation.

6. **Apply vapor barrier.**

   Learning Objectives
   Fasten poly to framing members.
   Express the importance of continuous vapor barrier.
   Apply acoustical sealant.
   Pass inspection.

7. **Blow in ceiling insulation.**

   Learning Objectives
   Calculate amount of insulation needed.
   Install depth gauge.
   Express the importance of safety while in the attic.

8. **Pour basement concrete floors.**

   Learning Objectives
   Analyze forms for concrete floors.
   Apply code requirements for interior floors.
   Convey safety concerns during the pour.

9. **Pass insulation inspection.**

   Learning Objectives
   Arrange meeting with building inspector.
   Prepare insulation, poly, sealant, and tape seams to meet industry standards.

10. **Apply job site safety.**

    Learning Objectives
    Make safety a priority for all on the job site.
    Convey safety as an attitude to everyone on the job site.
    Wear personal protective equipment, PPE.

11. **Differentiate drywall for ceilings and walls.**

    Learning Objectives
    Acknowledge two foot centers and 5/8" material.
    Apply ceiling drywall.
    Fasten half inch drywall to walls.
12. **Fasten drywall.**
   Learning Objectives
   Manage factory and cut ends to appropriate locations.
   Acknowledge appropriate screws for drywall thickness.
   Be aware of planning to use scraps.

13. **Install house wrap, windows, and doors.**
   Learning Objectives
   Apply house wrap.
   Install windows and doors.
   Apply appropriate flashing.

14. **Install roof trusses.**
   Learning Objectives
   Read truss lay out plan.
   Lay out top plates of walls.
   Wear personal protective equipment.
   Relate extreme safety during truss installation.

15. **Install roof coverings.**
   Learning Objectives
   Apply ice and water guard.
   Install roof paper.
   Fasten roof shingles.

16. **Install roof sheathing.**
   Learning Objectives
   Cut tails and add sub fascia.
   Position roof sheathing over centers of trusses.
   Nail roof sheathing according to manufacturers' specification.

**SCC Accessibility Statement**
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Additional information and forms can be found at: [www.southcentral.edu/disability](http://www.southcentral.edu/disability)

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