



Western Technical College

31410368 Exterior Trim

Course Outcome Summary

Course Information

Description	In this course, students will complete the exterior finishing aspects of a residential structure to include: soffit and fascia installation, composite trim installation, siding installation, and deck construction and finish. Students will perform these finishing operations by completing the exterior trim work for a house on site.
Career Cluster	Architecture and Construction
Instructional Level	Technical Diploma Courses
Total Credits	3
Total Hours	108

Textbooks

Carpentry and Building Construction (Student Edition). Copyright 2016. McGraw-Hill Education. Publisher: McGraw-Hill Publishing Company. **ISBN-13:** 978-0-02-140244-1. Required.

Learner Supplies

Safety glasses with side eye protection that meet Z87 OSHA guidelines. **Vendor:** Campus Shop. Required.

Proper work boots - \$35.00-75.00. **Vendor:** To be discussed in class. Required.

Proper work boots - \$35.00-75.00. **Vendor:** To be discussed in class. Required.

Cold weather workwear: work gloves, hat, insulated bibs/coveralls, insulated winter boots. **Vendor:** To be discussed in class. Optional.

Scientific Calculator - \$20. **Vendor:** Campus Shop. Required.

Experiential Learning

1. Community Based Learning Project
2. Work Based Learning

Program Outcomes

1. Use hand and power tools and equipment.
2. Apply industry recognized safety practices and procedures.
3. Analyze sustainable building practices.
4. Interpret construction drawings.
5. Demonstrate industry building practices and material application.
6. Recommend a plan of procedure to eliminate wasted time and materials.

Course Competencies

1. Examine different types of deck finishes to include floor and railing applications.

Assessment Strategies

- 1.1. Written Objective Test
- 1.2. Critique

Criteria

You will know you are successful when:

- 1.1. you list acceptable products that can be used for deck fasteners, framing, flooring, and railing applications.
- 1.2. you identify the characteristics and applications of wood, composite, and aluminum decking and railing materials.
- 1.3. you examine the installation of wood, composite, and aluminum railing components.
- 1.4. you pass a written exam with a minimum score of 70%.

Learning Objectives

- 1.a. Identify the materials used for deck framing.
- 1.b. Compare different types of finishing materials used for floor and railing applications.
- 1.c. Examine the installation of finishing components used in deck construction.

2. Build a deck.

Assessment Strategies

- 2.1. On-the-job Performance

Criteria

You will know you are successful when:

- 2.1. you lay out the deck supports at the proper location utilizing temporary stakes and a dry line.
- 2.2. you install concrete deck piers/footings at the previously marked locations at the proper elevation.
- 2.3. you install deck columns, girder(s), ledger board, and joists plumb and square with the building to achieve a flat, level, and straight platform.
- 2.4. you install deck flashing in shingle fashion to prevent water damage at the ledger board.
- 2.5. you install deck finishes including deck boards, fascia, stair risers, skirtboards, and railing system using the appropriate fasteners according to the manufacturer's specifications.

Learning Objectives

- 2.a. Locate deck supports.
- 2.b. Install deck footings.
- 2.c. Install supporting columns, girders, ledger board, joists, and steps.
- 2.d. Install deck flashing and deck boards.
- 2.e. Install deck railing.

3. Identify different roofing products.

Assessment Strategies

- 3.1. Written Objective Test

Criteria

You will know you are successful when:

- 3.1. you correctly identify the type of roof finishing components used from an architectural drawing.
- 3.2. you correctly label roof finishing components.
- 3.3. you pass a written exam with a minimum score of 70%.

Learning Objectives

- 3.a. Identify underlayment.
- 3.b. Identify ice and water shield.
- 3.c. Identify drip edge.
- 3.d. Identify step flashing, valley flashing, and vent stack flashing.
- 3.e. Identify three-tab shingles, architectural shingles, interlocking shingles, and metal roofing.
- 3.f. Identify shingle accessories including starter strip, ridge vents, and ridge cap.

4. Identify different types of windows.

Assessment Strategies

- 4.1. Written Objective Test

Criteria

You will know you are successful when:

- 4.1. you correctly identify the different types of windows illustrated on an architectural drawing.
- 4.2. you identify the stationary and operating sash of a window as illustrated on an architectural drawing.
- 4.3. you label the components of a window from a section drawing, including jambs, sash stiles and rails, check rail, glazing, stops, drip cap, muntins, mulls, and screens.
- 4.4. you categorize a window as wood, vinyl clad, aluminum clad, or composite.
- 4.5. you pass a written exam with a minimum score of 70%.

Learning Objectives

- 4.a. Identify casement, awning, double-hung, hopper, and sliding windows.
- 4.b. Identify the operating and stationary components of a window.
- 4.c. Identify the materials used to create the components of a window.

5. Install exterior trim and accessories.

Assessment Strategies

- 5.1. On-the-job Performance

Criteria

You will know you are successful when:

- 5.1. you correctly establish the bottom of the first row of siding to locate the correct position of corner posts.
- 5.2. you install all corner posts at the same elevation around the entire building.
- 5.3. you install frieze board to allow for proper termination and exposure of final row of siding.
- 5.4. you install blocking to provide the fastening of mechanical and utility fixtures.
- 5.5. you install overhead garage door jambs plumb, level, and straight.
- 5.6. you utilize the aluminum break to bend flashing to the correct profile.
- 5.7. you install all aluminum flashing to maintain a proper drainage plane to prevent leakage.

Learning Objectives

- 5.a. Locate the bottom of the first row of siding and corner boards.
- 5.b. Fasten inside and outside corner posts to structure.
- 5.c. Install frieze board.
- 5.d. Install trim components to provide for the installation of electrical, plumbing, and HVAC fixtures on the exterior of the home.
- 5.e. Utilize an aluminum break to bend flashing.
- 5.f. Install aluminum flashing.
- 5.g. Install overhead garage door jambs.

6. Install siding.

Assessment Strategies

- 6.1. On-the-job Performance

Criteria

You will know you are successful when:

- 6.1. you utilize cutting tools in a safe and effective manner.
- 6.2. you measure and cut individual pieces of siding to maintain clearances as specified by the manufacturer.
- 6.3. you fasten the siding to the structure in accordance with the manufacturer's specifications while maintaining proper siding exposure.
- 6.4. you apply caulk and sealants in the proper locations to achieve a proper drainage plane to prevent leakage and to maintain an attractive, finished product.
- 6.5. you utilize pneumatic nail guns and fasteners designed for the installation of siding products in a safe and effective manner.

Learning Objectives

- 6.a. Utilize equipment designed for cutting and installing siding in a safe and effective manner.
- 6.b. Cut siding.
- 6.c. Fasten siding to structure.
- 6.d. Apply caulk and sealants.