

# APR 217C : CARPENTER IX

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## Transcript title

Carpenter IX

## Credits

3

## Grading mode

Standard letter grades

## Total contact hours

55

## Lecture hours

22

## Lab hours

33

## Prerequisites

APR 216C.

## Course Description

Covers installation of trim used in finish work and estimating material needs. Covers trenching and excavating including identification of soil types, bearing capacities, and classifications of soil. Examines tools for and selection, applications, and methods of placing, bending, and cutting reinforcing steel.

## Course learning outcomes

1. Demonstrate safety when working in and around excavations.
2. Classify types and bearing capacities of soils.
3. Perform shoring, shielding, and sloping trenches and excavations following all safe practices.
4. Explain materials and requirements for bending, cutting, splicing, tying, and placement of reinforcing steel in various construction applications.
5. Install various types of trim for finish work.

## Content outline

1. Trenching and excavating, safety, preparation of building foundations
2. Soil types and properties, trenching, and excavation procedures
3. Groundwater and rock mitigation during excavation
4. Reinforcing concrete, selection, and uses of reinforcing materials
5. Concrete reinforcement bending, cutting, splicing, tying, placement of steel in foundations, walls, columns, beams, girders
6. Window, door, floor, and ceiling trim, types, methods of selection, cutting, fastening

## Required materials

Textbook is required.