

APR 218C : CARPENTER X

Transcript title

Carpenter X

Credits

3

Grading mode

Standard letter grades

Total contact hours

55

Lecture hours

22

Lab hours

33

Prerequisites

APR 217C.

Course Description

Covers the principles, equipment, and methods used to perform site layout using differential leveling and site layout requiring angular and distance measurements. Reviews trades mathematics to perform calculations related to angular measurements. Covers leveling and measurement tool use and application.

Course learning outcomes

1. Diagram a safe construction site layout.
2. Identify occupations, responsibilities, requirements, and tools of construction site layout.
3. Perform construction trade mathematics for site dimensions, building lines, elevations.
4. Use the tools and instruments of site layout.
5. Describe differential leveling.

Content outline

1. Site layout, differential leveling
2. Occupations and job scope and responsibilities for surveyors, filed engineers, carpenters
3. Reading, interpretation, and use of site and plot plan drawings
4. Laser instruments, tools, and communication for site layout
5. Site layout, angular and distance measurement, building lines, elevations, and trigonometric leveling
6. Transits, theodolites, electronic distance measurement, total stations use for site layout
7. Construction mathematics for site layout

Required materials

Textbook is required.