Course Information Form (CIF)

Course Code: LBR 139

Course Title: Highway Construction Plan Reading

Department: Applied Sciences and Technologies
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 46
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 3-0-3
Credit Hour Distribution:

Lecture: 3	Lab: 0	Clinical: 0	**Total: 3**

General Course Information

Catalog Description

Reading and interpreting highway construction plans and specifications.

General Course Objectives

Students will demonstrate proficiency in interpreting basic highway construction plans and specifications commonly used in central Illinois.

Minimum Placement Levels

English	Reading	Math
None	None	None

Prerequisites

Admission into the Laborers Apprenticeship program

Methods of Evaluation

The minimum evaluation methods include 2 plan reading exams.

Instructional Materials and Additional Supplies

None.

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Highway Plan Overview	1. Identify primary components of highway construction plan sets and their applications.	5	0	0
Highway Plan Survey Data	1. Identify detailed locations using station and offset. 2. Interpret horizontal and vertical curve data. 3. Calculate longitudinal and transverse slopes. 4. Interpret bearings and azimuths. 5. Identify project benchmarks.	10	0	0
Plan Details and Plan Notes	1. Interpret detail drawings in construction plans. 2. Explain the relationships between general plans and plan details. 3. Interpret plan notes. 4. Describe applications for plan notes.	8	0	0
Plan and Profile Sheets	1. Interpret plan, profile sheets, and data pertaining to pavement structure and utilities. 2. Identify project drainage patterns using construction plans.	9	0	0
Cross Sections	1. Interpret exaggerated scale highway cross sections. 2. Calculate earth volumes using cross sections.	5	0	0
Sewer Plans	1. Calculate pipe slopes and depths from plan data. 2. Interpret pipe and structure sizes and locations.	8	0	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
45	0	0