



FORT LEONARD WOOD, MO
NONCOMMISSIONED OFFICERS ACADEMY
SYLLABUS FOR 12H30
ADVANCE LEADER COURSE



CONSTRUCTION SUPERVISOR

Purpose:

- The 12H30 Construction Engineer Supervisor Advanced Leaders Course provides 12W, 12K, and 12R Non-Commissioned Officers (NCOs) with the knowledge and technical skills required to inspect and plan vertical construction projects; to lead and train the Soldiers in their squads or sections, and to assist in directing Construction Supervisor missions.

Course Scope:

- The Soldier receives Shared Engineer Training, MOS-specific training, Mandatory Training and a Situational Training Exercise / Construction project.

Course Prerequisites:

- Active Army enlisted personnel selected by DA (Active Army) or recommended by unit Commander. Qualified in MOS 12W, 12R, and 12K. Meets requirements outlined in DA Pam 611-21. Soldiers who have successfully completed the Warrior Leader Course (WLC) meet the height and weight requirements stated in AR 600-9 and who have been promoted to skill level 3 or are eligible for promotion to skill level 3.



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Security Clearance: Unclassified

Course Length–Weeks: 7 **Days:** **Hours:** 256

Class Sizes – Optimum: 12 **Min:** 4 **Max:** 16

Module: A / 001 18.1

Title: Mandatory Training

Module: B / 001 11.7

Title: Shared Engineer Task

Module: C / 001 165.2

Title: Technical Training

Module: D / 001 9

Title: Digital Training

Module: E / 001 72.0

Title: Situational Training Exercise (STX)

Module: F / 001 6.5

Title: Administrative



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Module: B / 001

Title: Construction Prints

Purpose: Demonstrate knowledge of reading construction prints and drawings by identifying lines, sections, symbols, dimensions, notes, specifications, and titles in the provided scenarios. Achieve a 70% on the exam.

Remarks: None

Technique(s) of Delivery:

Small Group Instruction (SGI) (SG)

Hours

8.5

Security Clearance: Unclassified

Lesson Title: Read Construction Prints and Drawings

References: TM 5-704 Construction Print Reading in the Field

Module: B / 002

Title: Prepare Bill of Materials

Purpose: Demonstrate knowledge of how to prepare a bill of material by verifying the accuracy of a materials take off list, complete a materials estimate list, and complete a bill of materials based upon the information contained in the provided scenarios. Achieve a 70% on the exam.

Remarks: None

Technique(s) of Delivery:

Small Group Instruction (SGI) (SG)

Hours

6.0

Security Clearance: Unclassified

Lesson Title: Prepare Bill of Materials

References: FM 5-412 Project Management, FM 5-426 Carpentry



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Module: B / 003

Title: Schedule Work

Purpose: Demonstrated knowledge of how to schedule work using the critical path method(CPM) by achieving a 70% on the exam.

Remarks: None

Technique(s) of Delivery:

Small Group Instruction (SGI) (SG)

Hours

22.5

Security Clearance: Unclassified

Lesson Title: Schedule Work

References: FM 5-412 Project Management

Module: B / 004

Title: Framing Square

Purpose: Demonstrate knowledge of how to utilize a framing square by achieving a 70% on the exam.

Remarks: None

Technique(s) of Delivery:

Small Group Instruction (SGI) (SG)

Hours

8.0

Security Clearance: Unclassified

Lesson Title: Utilize a Framing Square

References: FM 5-426 Carpentry



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Module: B / 005

Title: Construction of Concrete Forms and Structures

Purpose: Demonstrate knowledge of how to design concrete forms and structure by achieving a 70% on the exam..

Remarks: None

Technique(s) of Delivery:

Small Group Instruction (SGI) (SG)

Hours

17.0

Lesson Title: Construction of Concrete Forms and Structures

References: FM 5-428 Concrete and Masonry

Module: B / 006

Title: Calculate Materials for Masonry Structures.

Purpose: Demonstrate knowledge of how to calculate materials for masonry structures by achieving 70% on the exam.

Remarks: None

Technique(s) of Delivery:

Small Group Instruction (SGI) (SG)

Hours

9.5

Security Clearance: Unclassified

Lesson Title: Calculate Materials for Masonry Structures

References: FM 5-428 Concrete and Masonry



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Module: B / 007

Title: Supervise the Construction of Framed Structures

Purpose: Demonstrate knowledge of how to supervise the construction of framed structures by achieving a GO on the performance evaluation and a 70% on the exam.

Remarks: None

Technique(s) of Delivery:

Small Group Instruction (SGI) (SG)

Hours

8.5

Security Clearance: Unclassified

Lesson Title: Supervise the Construction of Framed Structures

References: FM 5-426 Carpentry, NAVEDTRA 14043 Builder 3 & 2, Volume 1, NAVEDTRA 14044 Builder 3 & 2, Volume 2

Module: B / 008

Title: Supervise the Installation of Building Utilities

Purpose: Demonstrate knowledge of the proper installation of building utilities by achieving a GO on the performance evaluation and a 70% on the exam.

Remarks: None

Hours

45

Security Clearance: Unclassified

Lesson Title: Supervise the Installation of Building Utilities

References: FM 3-34.471 Plumbing and Pipefitting, FM 5-424 Theater of Operations Electrical Systems



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Module: E / 001

Title: Situational Training Exercise / Construction Project

Purpose: Given scenarios that contain construction prints and specifications, individual and specialized equipment, operations orders (OPORD), and instructor guidance. Demonstrate knowledge in the skills obtained throughout the course by successfully completing all missions/scenarios and receiving a GO on all performance measures.

Remarks: None

Technique(s) of Delivery:

Small Group Instruction (SGI) (SG)

Hours

72

Security Clearance: Unclassified

Title: STX

Purpose: To validate all course POI and give the students feedback from the observations.



CONSTRUCTION SUPERVISOR



Written Examinations

**Construction Prints
Bill of Materials
Schedule Work
Framing Square
Concrete Forms
Masonry Structures
Framed Structures
Building Utilities**

Evaluations

**APFT
PRT Instruction
Operational Environment Brief
Student Led Discussion
Oral Engineer History Brief
In Ranks Inspection
Tactical Leadership
APA Essay
Memorandum for Record
Formal Memorandum**