

L1 PIPELAYER

LEVEL 1

Curriculum Notes

- 185 Hours (Includes 72.5 hours of Core Curriculum, which is a prerequisite for Level 1 completion and must be purchased separately. See p. 14 for ordering information.)
- Published: 1999
- Downloadable instructor resources that include module tests, PowerPoints®, and performance profile sheets are available at www.nccer.org/irc.

PAPERBACK

ISBN

Trainee Guide: \$67

978-0-13-014258-0

Instructor's Guide: \$67

978-0-13-014250-4

MODULES

All of the modules listed below are included in the Trainee Guide and the Instructor's Guide. The following ISBN and pricing information is for ordering individual modules only.

Job Site Safety (17.5 Hours)

Trainee \$20

ISBN 978-0-13-015304-3

Instructor \$20

ISBN 978-0-13-015315-9

(Module ID 24101) Describes appropriate personal protective equipment commonly used on the job site and the impact of housekeeping on safety and project completion. Describes common indicators of existing utilities and recommends safe methods for locating and working around existing utilities.

Tools and Equipment (22.5 Hours)

Trainee \$20

ISBN 978-0-13-015305-0

Instructor \$20

ISBN 978-0-13-015316-6

(Module ID 24102) Describes the safe use, care, and maintenance of pipelayer hand and power tools. Discusses methods for operating and maintaining dewatering equipment, generators, and compressors. Contains an introduction to drilling and tapping machines.

Rigging and Delivering Pipe and Associated Structures (7.5 Hours)

Trainee \$20

ISBN 978-0-13-015307-4

Instructor \$20

ISBN 978-0-13-015317-3

(Module ID 24103) Describes methods for receipt inspection, storage, and delivery to the trench of PVC, ductile iron, corrugated steel, and concrete pipe. Identifies the hand signals used by pipelayers when rigging pipe, and piping components, including manholes and appurtenances.

Cutting Pipe (12.5 Hours)

Trainee \$20

ISBN 978-0-13-015308-1

Instructor \$20

ISBN 978-0-13-015318-0

(Module ID 24104) Discusses practical methods for safely cutting common pipe materials. Describes pipe materials and standard sizes for thermoplastic, concrete, ductile iron, and corrugated steel pipe.

Gaskets, Joints, and Fittings (20 Hours)

Trainee \$20

ISBN 978-0-13-015309-8

Instructor \$20

ISBN 978-0-13-015319-7

(Module ID 24105) Describes methods for joining PVC, ductile iron, and concrete pipe, including O-ring pipe, slip joints, mechanical joints, and restraint joints. Discusses methods for joining pipe to pipe, pipe to appurtenances, and pipe to manhole connections, including transition couplings.

Introduction to Elevations (5 Hours)

Trainee \$20

ISBN 978-0-13-015300-5

Instructor \$20

ISBN 978-0-13-015310-4

(Module ID 24106) Discusses the use, care, and maintenance of the optical level, transit, and the pipe laser. Contains a brief introduction to elevations as it relates to the setup of these instruments. Describes common causes and solutions to laser problems in the field.

Trench Safety (7.5 Hours)

Trainee \$20

ISBN 978-0-13-015311-1

Instructor \$20

ISBN 978-0-13-015321-0

(Module ID 24107) Discusses soil behavior as it relates to trench failures, including common indications of an unstable trench. Introduces typical shoring, shielding, and sloping methods. Identifies characteristics that may make a trench a confined space and describes the safety measures needed to work in the trench.

Foundation Stabilization, Bedding, and Dewatering (7.5 Hours)

Trainee \$20

ISBN 978-0-13-015312-8

Instructor \$20

ISBN 978-0-13-015323-4

(Module ID 24108) Discusses methods for preparing the trench for pipe installation, including stabilization, bedding, and initial backfill. Describes effective methods for dewatering a trench and includes a section on troubleshooting dewatering equipment.

Testing Pipe (12.5 Hours)

Trainee \$20

ISBN 978-0-13-015313-5

Instructor \$20

ISBN 978-0-13-015324-1

(Module ID 24109) Discusses methods for preparing pressure and gravity systems for testing, including cleaning and inspecting pipe systems. Describes methods for testing pressure and gravity systems, including vacuum testing of concrete manholes.