



## 2-DAY PACP™ COURSE SYLLABUS

Pipeline Assessment Certification Program (PACP) Version 8.0

### REQUIRED TEXTS

PACP Manual – provided by NASSCO. A digital (PDF) version can be found on your NASSCO Training Source Account under My Courses.

### SUGGESTED REFERENCES

Videos, Webinars, Specification Guidelines, other educational opportunities and technical manuals available on [NASSCO.org](http://NASSCO.org).

### COURSE GOALS

PACP The purpose of PACP training and certification is to ensure that all pipeline assessment data is collected and coded in a consistent and reliable manner using four families of codes: Structural, Operation and Maintenance, Construction and Miscellaneous.

PACP provides the methodology to standardize the data collected during pipeline inspections. The first objective of PACP is to fully document structural deficiencies and construction features since those defects and features will have the most significant long-term influence on the pipe integrity and pipe management.

### COURSE ACTIVITIES

Presentation of Training Materials

Course Review

Multiple Choice/Open-Book Exam

### COURSE SCHEDULE

#### Day 1 (8 hours)

1. Welcome and Overview, *estimated time 45 minutes*
  - A. Course Content
  - B. Introduction to NASSCO
  - C. NASSCO Resources
  - D. Overview of PACP Manual
  
2. Introduction and Need for Categorization (Section 1), *estimated time 1.5 hours*
  - A. PACP Overview
  - B. Role of the Inspector
  - C. Origin of Condition Codes
  - D. How We Use PACP Data
  - E. Categories of Pipe Use
  - F. Pipeline Assessment Technologies
  - G. Reasons for PACP Inspection
  - H. General Approach to PACP Inspection Using CCTV

I. Background to Technical Issues

3. PACP Inspection Form – Header Section (Section 2), *estimated time 1.25 hours*
  - A. Inspection Form Instructions
  - B. PACP Inspection Deliverables
  - C. Header Section Instructions and Fields
  
4. PACP Details Section (Section 3), *estimated time 1.25 hours*
  - A. PACP Inspection Form – Details Section
  - B. Initial Coding
  - C. Final Coding
  - D. Column Entries
  - E. Sample PACP Inspection Form
  
5. Structural Coding (Section 4), *estimated time 3.25 hours*
  - A. Crack (C)
  - B. Fracture (F)
  - C. Broken (B)
  - D. Hole (H)
  - E. Deformed (D)
  - F. Collapse (X)
  - G. Joint (J)
  - H. Surface Damage (S)
  - I. Lining Features (LF)
  - J. Weld Failure (WF)
  - K. Point Repair (RP)
  - L. Bolts – Metal Pipe (BT)
  - M. Brickwork

**Day 2 (8 hours)**

1. Review of Day 1, *estimated time 15 minutes*
2. Operation and Maintenance Coding (Section 5), *estimated time 2 hours*
  - A. Deposits (D)
  - B. Roots (R)
  - C. Infiltration (I)
  - D. Obstacles/Obstructions (OB)
  - E. Vermin (V)
  - F. Grout Test and Seal (G)
  - G. Leak (LK) – Pressure Pipe Only
  
3. Construction Coding (Section 6), *estimated time 1 hour*
  - A. Tap (T)
  - B. Intruding Sealing Material (IS)
  - C. Line (L)
  - D. Access Points (A)
  - E. Valve (VA) – Pressure Pipe Only
  
4. Miscellaneous Coding (Section 7), *estimated time 1 hour*

5. Appendices A–F, *estimated time 1 hour*
  - A. Appendix A – Code List
  - B. Appendix B – General Guidelines and Color-Coded Charts
  - C. Appendix C – Condition Grading System
  - D. Appendix D – PACP-Based Risk Management (optional)
  - E. Appendix E – Pipe Shapes, Materials, Linings and Coatings (optional)
  - F. Appendix F – Condition Assessment of Pressure Pipes (optional)
  
6. Course Review, *estimated time 1.75 hours*
  - A. Course Review
  - B. Practice Pictures and Videos
  - C. PACP Jeopardy
  
7. Multiple Choice Exam, *estimated time 1 hour*

### **TESTING**

Each student will be expected to get at least 85% of the questions asked correct to become certified. If a passing grade is not achieved, one retake will be given.

### **ESTIMATED COURSE TIME**

- PACP: 16 hours

Total Course Time: 16 hours