

# North Hennepin Community College

## BIT 1800: Housing Field Inspection Fundamentals

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course provides both new and experienced housing inspectors with historical and current techniques and materials used in the construction of the structural, electrical and mechanical components within existing residential structures. The course focuses on common construction and installation techniques and equipment, while giving special emphasis to the visible indicators of system deterioration and failure and hazardous and/or non-professional installations.

**B. COURSE EFFECTIVE DATES:** 03/24/1999 - Present

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Introduction to housing inspection; soil types and common soil problems; common wood species and their characteristics; how mold, mildew, rot and decay affect structures
2. Structural elements (footings, foundations and structural framing members); wood beam strengths and stiffness
3. Exterior elements (structural and safety components, walks and driveways, property areas)
4. Roofs and roof construction
5. Electrical elements (service and branch circuit wiring)
6. Gas and oil furnaces
7. Hot water boilers and heat pumps
8. Plumbing elements (drain, waste and vent systems; water supplies and water heaters; fixtures)

#### **D. LEARNING OUTCOMES (General)**

1. Ability to inspect one to four unit residential buildings and identify common construction techniques. (Program Goals 1, 2, 3)
2. Ability to identify the individual components of the various systems, their condition, the implications that the condition of the components has to the structure and occupants and offer recommendations for eliminating hazards and deficiencies. (Program Goals 1, 2, 3; NHCC Core Ability Critical Thinking, comps. a, b, c)
3. Demonstrate knowledge necessary to understand the components of existing home systems (Program Goals 1, 2, 3)
4. Ability to identify, analyze, and solve problems that may arise during home inspections. (Program Goal 3; NHCC Core Ability Critical Thinking, comps. a, b, c)
5. Know how to effectively communicate housing inspection results to consumers both in writing and verbally. (Program Goals 1, 2, 3, 4; NHCC Core Ability Written and Oral Communication, comps. c, d, g)
6. Understand the importance of municipal inspection departments in the maintaining of neighborhoods. (Program Goals 1, 2)
7. Demonstrate fundamental knowledge to build upon while successfully performing home inspections. (Program Goals 1, 2, 3)

#### **E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

#### **F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

#### **G. SPECIAL INFORMATION**

None noted