Washington State Department of Licensing

Fundamentals of Home Inspection Course Curriculum

Effective December 2008

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Introduction

During the 2008 session, the Washington State Legislature passed ESSB 6006 requiring inexperienced individuals seeking a home inspector's license to complete 120-clock hour course in home inspection fundamentals and up to 40 hours of field training under the supervision of an experienced inspector. In addition to these requirements, inspectors seeking to renew their license in the future must complete 24 clock hours of continuing education every two years.

The Director of the Department of Licensing, with the guidance of the Washington Home Inspector Licensing Advisory Board, is charged with implementing this legislative mandate.

On the basis of extensive feedback and discussion with industry groups, the Department of Licensing and the Washington Home Inspector Licensing Advisory Licensing Board developed this curriculum as a guide for home inspection educators. While it's not necessarily to teach subjects in the sequence shown in this curriculum, every educator needs to make every effort to ensure that the courses taught meet the basic learning objectives required to ensure that inspectors are minimally competent.

Recommended Learning Levels

Not all subjects are as important as others. Not all subjects require the same level of learning. In developing the recommendations for a new fundamentals curriculum, the Department and Board also analyzed the recommended topics with respect to desirable learning levels.

Learning levels known as "Bloom's Taxonomy" are described in the following paragraphs. The paragraphs are preceded by designations such as "B-1". These designations will be used to identify the learning level recommended for a particular set of topics. A higher designation assumes that students have also achieved lower designated learning levels.

B-1 KNOWLEDGE. Knowledge is defined as the remembering of learned material. This may involve the recall of a wide range of material, from specific facts to complete theories, but all that is required is the remembering of the appropriate information. Examples: Know definitions of common terms, basic concepts, methods and procedures and principles.

B-2 COMPREHENSION. Comprehension is defined as the ability to grasp the meaning of material. These learning levels go one step beyond the simple remembering of material and represent the lowest level of understanding. Examples: Understand and interpret facts and principles.

B-3 APPLICATION. Application is defined as the ability to use learned material in new situations. Examples: Apply laws and theories to practical situations. Demonstrate correct usage of a method or procedure.

B-4 ANALYSIS. Analysis refers to the ability to study or determine the nature and relationship of the parts. Examples: Distinguish between fact and inference and evaluate the relevancy of data.

B-5 SYNTHESIS. Synthesis refers to the ability to put parts together to form a new whole. Learning outcomes in this area stress creative behaviors, with major emphasis on the formulation of new patterns or structures. Examples: Propose a plan for an experiment, integrate learning from the different areas into a plan for solving a complex problem.

B-6 EVALUATION. Evaluation refers to the ability to determine the significance or worth of something by careful study. Examples: Form a valid opinion through weighing of evidence.

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Educational Objectives for the Home Inspection Fundamentals Course

The learning objectives of the Fundamentals of Home Inspection course are intended to make a person minimally competent to enter the home inspection profession. The course focuses on home inspection principles, terminology, laws and regulations.

Topics in this curriculum are taught at the B-1 knowledge and B2 comprehension levels; because it's difficult to attain higher learning levels with only 120 clock hours of classroom instruction and still cover all required topics.

After passing the licensing examination, licensees will still need to obtain additional education that applies theory to practice.

Required Topic Areas and Educational Objectives

Section A – Professional Practices – 12 hours

1.0 Washington State Laws and Rules

Upon completion of this section, the student should:

- 1. Know and understand the Washington State Standards of Practice (SOP) for home inspections.
- 2. Know and understand the Washington State Code of Ethics (COE) for home inspectors.

2.0 Business Practices

Upon completion of this section, the student should:

- 1. Understand the amount of basic education required under Washington State Law for an inspector to be capable of doing a competent inspection.
- 2. Understand what equipment is needed for an inspector to be capable of doing a competent inspection.
- 3. Understand the dangers related to conducting a home inspection.
- 4. Understand basic business marketing principles.
- 5. Understand the basic administrative and record keeping requirements to run a business.

3.0 Legal Issues

Upon completion of this section, the student should:

- 1. Understand how home inspections relate to the real estate transaction.
- 2. Understand the importance of a properly completed inspection contract.
- 3. Understand the limitations of a visual inspection versus a technically exhaustive inspection.
- 4. Understand what business records must be maintained under state law.
- 5. Understand how to deal with customer complaints most effectively.

4.0 Communication

- 1. Know the pre-inspection and inspection routines.
- 2. Know how to write a thorough home inspection report.
- 3. Understand the necessary interpersonal communication skills that all inspectors need.
- 4. Be able to demonstrate good communication skills.

Section B – Technical Subjects – 96 Hours

1.0 Structural Components

Upon completion of this section, the student should:

- 1. Know the various types of foundation systems and how they are installed.
- 2. Know the proper procedure to inspect foundations and framing components.
- 3. Know the difference between uniform settlement and tipping settlement.
- 4. Be able to recognize red flags that indicate problem foundations.
- 5. Know and be able to list the types of materials used in residential floor, wall, and roof framing systems.
- 6. Understand basic framing techniques and be able to recognize when visible framing has been done incorrectly.
- 7. Be able to explain structural deficiencies to the client using language the client can understand.
- 8. Know when a structural issue is outside the scope of an inspector's depth of knowledge and when to refer it to an appropriate specialist.
- 9. Know how to properly describe structural components and record structural deficiencies in the written report.

2.0 Exteriors

Upon completion of this section, the student should:

- 1. Know the most common claddings systems and how they are properly installed.
- 2. Know when wood decks, balconies, stoops, stairs, porches and railings are properly built and correctly attached and flashed to a house.
- 3. Be able to identify various types of windows and doors, their materials, and when they are properly installed.
- 4. Be able to recognize when exterior components are in need to maintenance, damaged, or need to be replaced.
- 5. Be able to explain exterior deficiencies to the client using language the client can understand.
- 6. Know which professional is most appropriate to refer a client to for correction of exterior defects.
- 7. Know how to properly describe exterior components and record exterior deficiencies in the written report.

3.0 Roofing

- 1. Know the two types of roofs and which roofing systems are appropriate for them.
- 2. Be able to recognize the various types of roof covers and know when they're appropriate and properly installed and flashed.
- 3. Be able to recognize when roofing appurtenances are appropriate for various types of roof covers and are properly installed.
- 4. Be able to recognize various types of flashing and coping systems and know when they're appropriate and properly installed.
- 5. Be able to recognize various types of guttering systems and know when they are appropriate and properly installed.

- 6. Know how to inspect roofing systems for deficiencies from the surface, ladders or the ground and be able to recognize when roofing components are in need of maintenance, are damaged, or need to be replaced.
- 7. Be able to explain roofing system deficiencies to the client using language the client can understand.
- 8. Know which professional is most appropriate to refer a client to for correction of roofing defects.
- 9. Know how to properly describe roofing components and record exterior deficiencies in the written report.

4.0 Plumbing

Upon completion of this section, the student should:

- 1. Understand the basic configuration of residential water supply plumbing and distribution systems, fixtures and faucets, and drain/waste plumbing and vent systems.
- 2. Be able to recognize basic plumbing components and know how they should be installed, supported, and vented when necessary.
- 3. Understand the differences between various plumbing materials and the implications of those differences.
- 4. Know the different types of water heating systems; understand their components, function and basic operation; and know when they're properly installed.
- 5. Know the different types of fuel storage devices for water heating systems and how they should be installed and vented when necessary.
- 6. Be able to recognize and distinguish the difference between storm water sump pump systems and waste ejector pump systems and know how they should be installed and vented when ventilation is necessary.
- 7. Know how to recognize leaks around plumbing fixtures and pipe connections.
- 8. Be able to recognize when supply plumbing, waste plumbing, water heating, fuel system, sumps and pumps and waste ejector components are in need of maintenance, are damaged, or need to be replaced.
- 9. Be able to explain deficiencies of these systems to the client using language the client can understand.
- 10. Know which professional is most appropriate to refer a client to for correction of plumbing defects.
- 11. Know how to properly describe plumbing system components and deficiencies of these systems in the written report.

5.0 Electrical Systems

- 1. Understand the basic configuration of residential electrical systems
- 2. Be able to recognize basic electrical components and know when they should be used and how they should be installed.
- 3. Be able to safely remove the deadfront cover from a service entrance panelboard and inspect the interior components for deficiencies.
- 4. Understand the differences between various wiring methods, how they should be installed and when their use is appropriate.
- 5. Know how to test electrical receptacles for power, proper grounding and polarity with commonly used testing devices.
- 6. Be able to recognize improper installation and common deficiencies in other electrical components.

- 7. Be able to recognize solid strand aluminum branch circuitry and understand the implications of its presence in a residential electrical system.
- 8. Understand how residential electrical systems are grounded and bonded.
- 9. Be able to explain electrical deficiencies to the client using language the client can understand.
- 10. Know which professional is most appropriate to refer a client to for correction of electrical defects.
- 11. Know how to properly describe electrical system components and deficiencies of the electrical system in the written report.

6.0 Heating Systems

Upon completion of this section, the student should:

- 1. Understand the basic configuration of residential heating systems.
- 2. Be able to recognize basic heating system components and know how they should be installed.
- 3. Understand the differences between various types of heating systems and the implications of those differences.
- 4. Know how to inspect various furnaces, boilers, heat pumps, electric central heating units, baseboard and in-wall electrical heaters, ducts, distribution plumbing, fixtures and visible hydronic heating pipe connections, including their various controls and plumbing and wiring connections.
- 5. Be able to recognize when heating system components are in need of maintenance, are damaged, or need to be replaced.
- 6. Be able to explain heating deficiencies to the client using language the client can understand.
- 7. Know which professional is most appropriate to refer a client to for correction of heating system defects.
- 8. Know how to properly describe heating system components and deficiencies of the heating system in the written report.

7.0 Cooling Systems

- 1. Understand the basic configuration of residential cooling systems.
- 2. Be able to recognize basic cooling system components and know how they should be installed.
- 3. Understand the differences between various types of cooling systems and the implications of those differences.
- 4. Know how to inspect various types of cooling systems including their various controls and plumbing and wiring connections and measure temperature split when running.
- 5. Be able to recognize when cooling system components are in need of maintenance, are damaged, or need to be replaced.
- 6. Be able to explain cooling system deficiencies to the client using language the client can understand.
- 7. Know which professional is most appropriate to refer a client to for correction of cooling system defects.
- 8. Know how to properly describe cooling system components and deficiencies of the cooling system in the written report.

8.0 Interiors

Upon completion of this section, the student should:

- 1. Understand the basic types of interior wall, floor and ceiling finishes and how they should be installed.
- 2. Know how to inspect interior doors, cabinets, countertops, and the interior of windows for defects.
- 3. Be able to recognize when interior components are in need of maintenance, are damaged, or need to be replaced.
- 4. Be able to explain interior deficiencies to the client using language the client can understand.
- 5. Know which professional is most appropriate to refer a client to for correction of interior defects.
- 6. Know how to properly describe interior components and any interior deficiencies in the written report.

9.0 Insulation & Ventilation

Upon completion of this section, the student should:

- 1. Understand the purpose of insulation and where it is used in residential dwellings.
- 2. Be able to recognize various types of insulation and know how it should be installed.
- 3. Understand the characteristics of various insulating materials and the implications of those differences.
- 4. Understand why attics and roof planes are ventilated and know when ventilation configurations are appropriate.
- 5. Be able to recognize when insulation is inadequate, damaged and need repair or needs to be replaced.
- 6. Know how interior ventilation devices that pass through the attic and roof plane are supposed to be installed and be able to recognize moisture issues caused by improper ventilation.
- 7. Know which professional is most appropriate to refer a client to for correction of insulation and ventilation defects.
- 8. Know how to properly describe insulation and ventilation components and any insulation and ventilation deficiencies in the written report.

10.0 Fireplaces and Solid Fuel Burning Appliances and Chimneys

- 1. Know the various types of fireplaces and solid fuel burning appliances and understand how they are supposed to function.
- 2. Be able to inspect the condition and installation of wood-burning fireplaces and solid fuel burning appliances and test their damper operation, when applicable, without building a fire in the hearth.
- 3. Be able to inspect the condition and installation of gas-burning fireplaces and appliances and test them when pilot lights are functional.
- 4. Be able to inspect the condition and installation of gas log sets and their associated burners and plumbing components.
- 5. Be able to recognize various types of fireplace and stove exhaust ventilation devices and know when they are appropriate and installed correctly.
- 6. Be able to inspect visible portions of the top and bottom of chimney flues without the use of specialized equipment and when the top of the chimney can be safely reached using a ladder.

- 7. Be able to recognize when fireplace, stove or chimney components are in need of maintenance, are damaged and need repair or need to be replaced.
- 8. Be able to explain fireplace, stove or chimney deficiencies to the client using language the client can understand.
- 9. Know which professional is most appropriate to refer a client to for correction of fireplace, stove and chimney defects.
- 10. Know how to properly describe fireplace, stove and chimney components and report deficiencies in the in the written report.

11.0 Site

Upon completion of this section, the student should:

- 1. Understand proper grading and site drainage practices and understand how improperly configured grading and drainage can negatively impact a structure and the flatwork around a structure.
- 2. Be able to recognize poor grading and drainage configurations.
- 3. Be able to inspect driveways, patios, walkways, the visible elements of in-ground drains and retaining walls for defects.
- 4. Be able to explain grading and site drainage deficiencies to the client using language the client can understand.
- 5. Know which professional is most appropriate to refer a client to for correction of site grading and drainage issues.
- 6. Know how to properly describe site grading and drainage components and deficiencies in the written report.

12.0 Attached Garages & Carports

Upon completion of this section, the student should:

- 1. Understand how to inspect attached garages and carports.
- 2. Know how to properly inspect and test overhead garage doors and their automatic opening devices for proper installation and safe operation.
- 3. Understand the importance of fire-resistant walls, ceilings and doors between a garage and a house and be able to recognize when these are improperly installed or constructed.
- 4. Be able to recognize when overhead doors and their components are improperly installed, in need of maintenance, are damaged or need to be replaced.
- 5. Be able to explain deficiencies found in attached garages and carports to the client using language the client can understand.
- 6. Know which professional is most appropriate to refer a client to for correction of deficiencies found in attached garages and carports.
- 7. Know how to properly describe components of attached garages and carports and report deficiencies of these systems/components in the written report

13.0 Wood Destroying Organisms & Pest Conducive Conditions

- 1. Understand the differences between a Structural Pest Inspector (SPI) and a home inspector under Washington State law.
- 2. Know the limitations of what a home inspector may or may not tell a client about wood rot, pest-conducive conditions and insect infestation/damage.

- 3. Know how to recognize pest-conducive conditions and be able to tell a client how to best correct them.
- 4. Understand the basic mechanism of wood rot fungi, be able to recognize commonly found wood rot fungi and be able to inspect for evidence of damage caused by wood rot fungi in homes with minimal probing.
- 5. Know how to recognize when an issue might be insect related and when to refer the client to a licensed SPI for further evaluation and corrections as necessary.
- 6. Be able to explain fungal damage and pest conducive conditions to the client and make recommendations for correction using language the client can understand.
- 7. Know how to properly report wood rot fungi in the written report.

Section C – Other Subjects – 12 hours

1.0 Alternate Construction Methods

Upon completion of this section, the student should:

- 1. Know the differences between conventionally built homes and modular and manufactured homes and understand inspection issues commonly encountered with modular and manufactured homes.
- 2. Understand what insulated concrete form (ICF) systems are and how to recognize and inspect them.
- 3. Understand the inspection issues unique to milled log versus hand-scribed log homes.
- 4. Understand structural insulated panel systems (SIPS) and their unique inspection issues.
- 5. Have a general understanding of other types of uncommon construction techniques.
- 6. Be able to explain deficiencies of these structures and components to the client using language the client can understand.
- 7. Know how to properly describe these structures and components and report their deficiencies in the written report.

2.0 Environmental Conditions or Hazardous Materials

- 1. Have an understanding of what radon gas is, what the "hot" spots are in Washington State and how and when to report the presence of radon gas.
- 2. Understand the rules that apply to abandoned underground oil storage tanks (UST) under Washington State Law.
- 3. Understand what mold is and what factors contribute to the formation and spread of mold in residential construction.
- 4. Understand what asbestos is, the potential health implications of its presence in homes, what materials commonly contain asbestos fiber and what constitutes friable asbestos.
- 5. Know what lead is and what materials in a home commonly contain lead.
- 6. Have a general understanding of the hazards associated with exposure to other environmental conditions or hazardous materials, including but not limited to urea formaldehyde, electromagnetic fields microwaves, etc.
- 7. Be able to intelligently answer the client's questions about these issues or refer the client to an appropriate professional when the answers aren't known.

3.0 Building Codes

Upon completion of this section, the student should:

- 1. Understand the difference between a municipal building inspector and a home inspector and understand the core competencies unique to each as well as their common core competencies.
- 2. Know where and how to determine which codes are being used in one's areas of operation.
- 3. Understand how to look up code requirements in code publications.
- 4. Know what code violations are most commonly encountered by home inspectors.
- 5. Be able to explain possible code violations found to the client using language the client can understand.
- 6. Know how and when to refer the client to the Authority Having Jurisdiction (AHJ) to resolve potential code issues.

4.0 Product Quality and Safety Issues

- 1. Know how to investigate product safety concerns and look up manufacturer recalls on the Consumer Product Safety Commission (CPSC) website.
- 2. Be familiar with and able to recognize product quality and safety issues commonly encountered in this region.
 - Defective composite roofs.
 - Defective in-wall forced air electric heaters.
 - Defective polybutylene plumbing fittings.
 - Other
- 3. Understand the differences between various plumbing materials and the implications of those differences.
- 4. Know how to recognize leaks around plumbing fixtures and pipe connections.
- 5. Be able to explain product quality and safety issues to the client using language the client can understand.
- 6. Know which professional is most appropriate to refer a client to for correction of product quality and safety issues.