# SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



# **COURSE OUTLINE**

COURSE TITLE: Home Inspection II

CODE NO.: HMI 205 SEMESTER: THREE

**PROGRAM:** Home Inspection Technician

AUTHOR: Roman Peredun Jack Davidson

DATE: September PREVIOUS OUTLINE September

2014 **DATED**: 2013

**APPROVED:** 

"Corey Meunier"

CHAIR DATE

TOTAL CREDITS: THREE

**PREREQUISITE(S):** HMI112 – Home Inspection I

**HOURS/WEEK:** THREE

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Home Inspection II HMI 205

#### I. COURSE DESCRIPTION:

This course begins to build defect recognition skills using the knowledge gained in carpentry, electrical, heating and plumbing, etc. Students will cover inspection methodology through practical demonstrations and exercises to develop an appreciation for systematic inspections in reducing errors and omissions.

#### II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. Apply knowledge of residential home construction, related trades and building codes to recognizing deficiencies within readily accessible components of the following systems:

### 1.1 Roof System

Potential Elements of the Performance:

- Inspect:
  - 1. accessible roof coverings
  - 2. accessible roof drainage systems
  - 3. accessible flashings
  - 4. accessible skylights, chimneys, and roof penetrations
- **Describe** the roof coverings.
- **Report** on the method(s) used to inspect the roof(s).

#### 1.2 Exterior

## Potential Elements of the Performance:

- Inspect:
  - 1. exterior wall covering, flashing and trim
  - 2. all exterior doors
  - 3. attached or *adjacent* decks, balconies, steps, porches, and their associated railings
  - 4. eaves, soffits, and fascias where accessible from the ground level
  - 5. vegetation, grading, and surface drainage on the property when any of these are likely to adversely affect the building
  - 6. walkways, patios, and driveways leading to dwelling entrances
  - 7. landscaping structure attached or adjacent to the building when likely to adversely affect the building
  - 8. attached garage or carport
  - 9. garage doors and garage door operators for attached garages
- **Describe** the exterior wall covering(s).
- **Report** the method(s) used to inspect the exterior wall elevations.

# 1.3 Structural System

## Potential Elements of the Performance:

# • Inspect:

- 1. structural components including visible foundation and framing
- 2. by *probing* a sample of structural components where deterioration is suspected or where clear indications of possible deterioration exist

#### Describe:

- 1. foundation, and *report* the methods used to *inspect* the *under-floor crawl space*
- 2. floor structure
- 3. wall structure
- 4. ceiling structure
- 5. roof structure, and *report* the methods used to *inspect* the attic
- Report on limitation of structural components not visible or accessible.

#### 1.4 Insulation

#### Potential Elements of the Performance:

- *Inspect* insulation and vapour barriers in unfinished spaces.
- **Describe** insulation and vapour barriers in unfinished spaces.
- **Report** absence of insulation in unfinished spaces within the building envelope.

#### 1.5 Plumbing System

#### Potential Elements of the Performance:

#### • Inspect:

- 1. interior water supply and distribution *systems* including all fixtures and faucets
- 2. drain, waste and vent systems including all fixtures
- 3. water heating equipment
- 4. vent systems, flues, and chimneys
- 5. fuel storage and fuel distribution systems
- 6. drainage sumps, sump pumps, and related piping

#### Describe:

- 1. water supply, distribution, drain, waste, and vent piping materials
- 2. water heating equipment including the energy source
- 3. location of main water and main fuel shut-off valves

# 2. Review and examine a variety of case studies to refine defect recognition knowledge and skills, and reporting techniques.

Potential Elements of the Performance:

• A review of instructor selected case studies

# 3. Complete a home inspection portfolio (ongoing)

#### III. TOPICS:

- 1. Structural system inspection.
- 2. Exterior inspection.
- 3. Roof inspection.
- 4. Insulation inspection.
- 5. Plumbing system inspection.
- 6. Defect recognition and reporting
- 7. Portfolio

#### IV. REQUIRED RESOURCES / TEXTS / MATERIALS:

- The Complete Book of Home Inspection, 4<sup>th</sup> Edition, Norman Becker, McGraw-Hill 2011
- Inspecting a House, Rex Cauldwell, Taunton Press 2001 (all the above to be available through the college bookstore in late fall)
- Laptop computer and storage device / CD / DVD, HMI112 portfolio, camera
- Process of inspection and list of deficiencies to be distributed by instructor

# V. EVALUATION PROCESS / GRADING SYSTEM:

Quizzes, tests, assignments	- 30 %
Lab work / practical assignments	- 40 %
Portfolio / DVD	- 20 %
Attendance	- 10 %

for a course.

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	Grade Point Equivalent
A+	90 – 100%	4.00
Α	80 – 89%	
В	70 - 79%	3.00
С	60 - 69%	2.00
D	50 – 59%	1.00
F (Fail)	49% and below	0.00
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements	

Home Inspection II HMI 205

NR Grade not reported to Registrar's office.
W Student has withdrawn from the course without academic penalty.

#### VI. SPECIAL NOTES:

#### Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

#### VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.



HMI205 Home Inspection II – Course Plan

	Hivit205 Hottle Inspection II – Course Flan									
Week	Outcomes	Format	Hrs	Topic /Content	Readings	Assignments	Assessment	Resources		
1	Review	Lecture	3	Topic: Introduction to and	Standards of	Assignment	Weekly progress	CAHPI / OAHI / ASHI		
				History of home inspection /	Practice and	for next	and review of	Standards of Practice		
				Standards of practice	text pages as	class review	questions /quiz			
				Description: Review and	assigned by	various report	/ assignments	OAHI DVD of defect		
				discussion of standards / report	instructor	writing		recognition		
				writing process		systems /		Complete Book of Home		
				Application: CAHPI (OAHI)	DVD/ defect	sample	Submitted work	Inspection – N. Becker		
				Standards of Practice	recognition /	reports	review	Inspecting a House -		
					case studies			R. Cauldwell		
2-3-4	1.1, 2, 3	Review	2	Review assignment / quiz at	Standards of	Field	Weekly progress	As above and camera		
				beginning of each class / review	Practice and	assignment for	and review of			
				/ discussion of answers	text pages as	next class	questions /quiz			
					assigned by	photos of roof	/ assignments			
		Lecture	5	Topic: Roof Systems	instructor	system / write				
				<u>Description</u> : inspection		up report	Submitted work			
				methodology / identify /			review			
				describe / report deficiencies/						
				report writing process						
				Application: case studies /	DVD/ defect					
		Lab	2	defect recognition / report	recognition /					
				writing exercises photos / group	case studies					
				discussion / review/ field trips						
				to shop						
				I.e. speaker – related building		Assignment	Completion of			
				materials / discussion /		preparation	roof system			
				performance.		for quiz next	report			
				i.e. review material / products		week /				
				<u>in shop</u>		readings				

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5-6-7	1.2, 2, 3	Review	2	Review assignment / quiz at	Standards of	Field	Weekly progress	As above and camera
				beginning of each following	Practice and	assignment for	and review of	
				class / review / discussion of	text pages as	next class	questions /quiz	
				answers	assigned by	photos of	/ assignments	
		Lecture	5	Topic: Exterior Systems	instructor	exterior		
				<u>Description</u> : inspection		system / write	Submitted work	
				methodology / identify /		up report	review	
				describe / report deficiencies/				
				report writing				
				Application: case studies /	DVD/ defect			
		Lab	2	defect recognition / report	recognition /			
				writing exercises photos / group	case studies			
				discussion / review/ field trips				
				to shop				
				I.e. speaker – related building		Assignment		
				materials / performance.		preparation	Completion of	
				i.e. review material / products		for quiz next	exterior system	
				in shop / field trip to building		week /	report	
				site		readings		
8-9-	1.3, 2, 3	Review	2	Review assignment / quiz at	Standards of	Field	Weekly progress	As above and camera
10				beginning of each following	Practice and	assignment for	and review of	
				class / review / discussion of	text pages as	next class –	questions /quiz	
				answers	assigned by	photos of	/ assignments	
		Lecture	5	Topic: Structure Systems	instructor	structure		
				Description: inspection		system / write	Submitted work	
				methodology / identify /		up report	review	
				describe / report deficiencies/				
				report writing				
				Application: case studies /	DVD/ defect			
				defect recognition / report	recognition /			
				writing exercises photos / group	case studies			
		Lab	2	discussion / review/ field trips				
				to shop				

				I.e. speaker – related building materials / performance / City building inspector / building materials / performance. i.e. review material / products in shop / field trip to building site		Assignment / preparation for quiz next week / readings	Completion of structure system report	
11	1.4, 2, 3	Lab	1	- review assignment at beginning of each following class / review / discussion of answers  Topic: Insulation Systems  Description: inspection methodology / identify / describe / report deficiencies/ report writing process  Application: case studies / report writing exercises photos / group discussion / review/ field trips to shop i.e. review material / products in shop i.e. speaker — related building materials / discuss / performance	CAHPI Standards of Practice  As assigned by instructor  DVD/ defect recognition / case studies	Field assignment for next class – photos of system / report write up  Assignment / preparation for next week quiz	Weekly progress review of questions /quiz / assignments Submitted work review  Completion of insulation system report	
12-13	1.5, 2, 3	Review	1	Review assignment / quiz at beginning of each following class / review / discussion of answers	Standards of Practice and text pages as assigned by	Field assignment for next class – photos of	Weekly progress and review of questions /quiz / assignments	As above and camera
		Lecture	4	Topic: Plumbing Systems  Description: inspection methodology / identify /	instructor	plumbing system / write up report	Submitted work review	

		Lab	1	describe / report deficiencies/ report writing Application: case studies / defect recognition / photos / group discussion / review/ field trips to shop i.e. speaker – Plumbing contractor or city building inspector i.e. view material / products in shop / field trip to building site	DVD/ defect recognition / case studies	Assignment preparation for quiz next week / readings	Completion of plumbing system report	
14	1, 2, 3	Group # 1 Lab Group # 2 Lab	2 2 2	Topic: Field inspection of home  Description: inspection methodology / identify / describe / report deficiencies/ report writing Application: practical application / defect recognition / photos / group discussion	Standards of Practice and text pages as assigned by instructor  DVD/ defect recognition / case studies	Assignment preparation for test next week	Weekly progress and review of questions /quiz / assignments Submitted work review	As above
15	1, 2, 3	Lecture	2	Review assignment / quiz at beginning of each following class / review / discussion of answers  Topic: Report writing summary  Description: inspection methodology / identify / describe / report deficiencies/ report writing  Application: practical application / defect recognition / photos / group discussion	Standards of Practice and text pages as assigned by instructor  DVD/ defect recognition / case studies	Assignment completion of final inspection report	Weekly progress and review of questions /quiz / assignments  Submitted work review  Completion of final report / assignment	As above

				Final assignment to be submitted		
16	1, 2, 3	Lecture	3	Review and take up final test		