

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

SAULT STE. MARIE, ONTARIO



COURSE OUTLINE

COURSE TITLE: Home Inspection III

CODE NO. : HMI 211 **SEMESTER:** FOUR

PROGRAM: Home Inspection

AUTHOR: Jack Davidson

DATE: January 2016 **PREVIOUS OUTLINE DATED:** January 2015

APPROVED:

"Corey Meunier"
CHAIR

TOTAL CREDITS: THREE

PREREQUISITE(S): HMI112 and HMI205 (Home Inspection I and II)

HOURS/WEEK: THREE

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I. COURSE DESCRIPTION:

Students will build on the defect recognition skills developed in Home Inspection II and use these skills to complete comprehensive practical exercises. Case studies will be used to enhance learning.

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 *Electrical System*

Potential Elements of the Performance:

- ***Inspect:***
 1. service drop
 2. service entrance conductors, cables, and raceways
 3. service equipment and main disconnects
 4. service grounding
 5. interior components of service panels and sub panels
 6. conductors
 7. over current protection devices
 8. a *representative number of installed* lighting fixtures, switches, and receptacles
 9. ground fault circuit interrupters (if appropriate)
- ***Describe:***
 1. amperage and voltage rating of the service
 2. location of main disconnect(s) and sub panels
 3. *wiring methods*
- ***Report:***
 1. on the absence of smoke detectors
 2. on the absence of carbon monoxide detectors (if applicable)
 3. on the presence of arc fault circuit interrupters

1.2 *Heating System*

Potential Elements of the Performance:

- ***Inspect:***
 1. *visually accessible* components of *installed* heating equipment
 2. vent systems, flues, and chimneys
 3. fuel storage and fuel distribution *systems*
- ***Describe:***
 1. energy source(s)
 2. heating method(s) by distinguishing characteristics
 3. chimney(s) and/or venting material(s)
- ***Report*** combustion air sources/make up air and exhaust venting methods.

1.3 Air Conditioning SystemPotential Elements of the Performance:

- **Inspect** the permanently *installed* central air conditioning equipment.
- **Describe:**
 1. the energy source
 2. the cooling method by its distinguishing characteristics

1.4 InteriorPotential Elements of the Performance:

- **Inspect:**
 1. walls, ceilings, and floors
 2. steps, stairways, and railings
 3. countertops and *installed* cabinets
 4. a *representative number* of doors and windows
 5. walls, doors and ceilings separating the habitable spaces and the garage

1.5 Mechanical and natural ventilationPotential Elements of the Performance:

- **Inspect:**
 1. ventilation of attics and foundation areas
 2. mechanical ventilation *systems*
 3. ventilation systems in rooms where moisture is generated such as kitchen, bathrooms, laundry rooms
- **Describe:**
 1. ventilation of attics and foundation areas
 2. mechanical ventilation *systems*
 3. ventilation systems in rooms where moisture is generated such as kitchen, bathrooms, laundry rooms

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. Electrical system inspection.
2. Heating system inspection.
3. Air conditioning system inspection.
4. Interior inspection.
5. Mechanical and natural ventilation inspection.
6. Case studies
7. Portfolio

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

- The Complete Book of Home Inspection, 4th 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, HMI205 portfolio, camera
- Process of inspection and list of deficiencies to be distributed by instructor.

V. EVALUATION PROCESS/GRADING SYSTEM:

Quizzes and tests	- 30 %
Labs / practical assignments	- 40 %
Portfolio / DVD	- 20 %
Attendance	- 10 %

The following semester grades will be assigned to students:

Grade	<u>Definition</u>	<i>Grade Point Equivalent</i>
A+	90 – 100%	4.00
A	80 – 89%	
B	70 - 79%	3.00
C	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 for a course.
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.

						readings		
5-6	1.7, 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 instructor		Weekly progress and review of questions /quiz / assignments	As above and camera
		Lecture	4	<u>Topic: Heating Systems</u> <u>Description:</u> inspection methodology / identify / describe / report deficiencies/ report writing process <u>Application:</u> case studies / report writing exercises photos / group discussion / review/ field trips to shop	DVD/ defect recognition / case studies	Field assignment for next class – photos of heating system / write up report	Submitted work review	
		Lab	1	i.e. <u>review material</u> / <u>products in shop</u> i.e. speaker – HVAC contractor / equipment / discuss / performance		Assignment... preparation for quiz next week	Completion of heating system report	
7 - 8	1.8, 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 instructor		Weekly progress and review of questions /quiz / assignments	As above and camera
		Lecture	4	<u>Topic: Air Conditioning / Cooling / Heat pump Systems</u> <u>Description:</u> inspection methodology / identify / describe / report deficiencies/ report writing process <u>Application:</u> case studies / report writing exercises photos / group discussion / review/	DVD/ defect recognition / case studies	Field assignment for next class – photos of AC system / write up report	Submitted work review	

		Lab	1	field trips to shop i.e. <u>review material / products in shop</u> i.e. speaker – HVAC contractor / equipment / discuss / performance		Assignment... preparation for quiz next week / readings	Completion of AC system report	
9-10	1.10, 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 instructor		Weekly progress and review of questions /quiz / assignments	As above and camera
		Lecture	4	<u>Topic: Mechanical and Natural Ventilation Systems</u> <u>Description:</u> inspection methodology / identify / describe / report deficiencies/ report writing process <u>Application:</u> case studies / report writing exercises photos / group discussion / review/ field trips to shop	DVD/ defect recognition / case studies	Field assignment for next class – photos of ventilation system / write up report	Submitted work review	
		Lab	1	i.e. view material / <u>products in shop</u> i.e. speaker – HVAC contractor / equipment / discuss / performance		Assignment... preparation for quiz next week / readings	Completion of ventilation system report	
11-12	1.9, 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 instructor		Weekly progress and review of questions /quiz / assignments	As above and camera
		Lecture	4	<u>Topic: Interior Systems</u> <u>Description:</u> inspection methodology / identify / describe / report deficiencies/		Field assignment for next class – photos of	Submitted work review	

		Lab	1	report writing process <u>Application:</u> case studies / report writing exercises photos / group discussion / review/ field trips to shop <u>i.e. view material / products in shop</u> i.e. speaker – related building materials / discuss / performance test and review	DVD/ defect recognition / case studies	interior system / write up report Preparation for next week's field trip(s) - 2	Completion of interior system report	
13	1, 2, 3	Lab Group # 1 Lab Group # 2	2 2	<u>Topic:</u> Field inspection of house <u>Description:</u> inspection methodology / identify / describe / report deficiencies/ report writing process <u>Application:</u> practical application / photos / group discussion	Standards of Practice and text pages as assigned by instructor DVD/ defect recognition / case studies	Field assignment for next class – complete and compile photos of all systems / write up final report	Weekly progress and review of final project / assignments Submitted work review	As above and camera
14-15	1, 2, 3	Lecture Lab	3 3	<u>Topic:</u> Practical application of field home inspection <u>Description:</u> inspection methodology / identify / describe / report deficiencies/ report writing process <u>Application:</u> practical application / photos / group preparation and submission of final home inspection report Final assignment to be submitted	Standards of Practice and text pages as assigned by instructor DVD/ defect recognition / case studies	Test Week 15 Final assignment to be submitted	Weekly progress review of questions /quiz / assignments Submitted work review	As above and camera

16	1, 2, 3	Lecture	3	Review / take up final test Presentation , sharing and discussion of final projects		Review and presentations		
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