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| **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:** | January2015 |
| **APPROVED:** |  |  |
|  | “Corey Meunier”CHAIR |  |
| **TOTAL CREDITS:** | THREE |
| **PREREQUISITE(S):** | HMI112 and HMI205 (Home Inspection I and II) |
| **HOURS/WEEK:** | THREE |
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| *For additional information, please contact Corey Meunier, Chair* |
| ***School of Technology & Skilled Trades*** |
| ***(705) 759-2554, Ext. 2610*** |

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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. |

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| **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 drop2. service entrance conductors, cables, and raceways3. service equipment and main disconnects4. service grounding5. interior components of service panels and sub panels6. conductors7. over current protection devices8. a *representative number* of *installed* lighting fixtures, switches, and receptacles9. ground fault circuit interrupters (if appropriate)* ***Describe:***

1. amperage and voltage rating of the service2. location of main disconnect(s) and sub panels3. *wiring methods** ***Report:***

1. on the absence of smoke detectors2. 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 equipment2. vent systems, flues, and chimneys3. fuel storage and fuel distribution *systems** ***Describe:***

1. energy source(s)2. heating method(s) by distinguishing characteristics3. chimney(s) and/or venting material(s)* ***Report*** combustion air sources/make up air and exhaust venting methods.
 |
|  | ***1.3*** | ***Air Conditioning System*** |
|  |  | Potential Elements of the Performance:* ***Inspect*** the permanently *installed* central air conditioning equipment.
* ***Describe:***

1. the energy source2. the cooling method by its distinguishing characteristics |
|  | ***1.4*** | ***Interior*** |
|  |  | Potential Elements of the Performance:* ***Inspect:***

1. walls, ceilings, and floors2. steps, stairways, and railings3. countertops and *installed* cabinets4. a *representative number* of doors and windows5. walls, doors and ceilings separating the habitable spaces and the garage |
|  | ***1.5*** | ***Mechanical and natural ventilation***Potential Elements of the Performance: |
|  |  | * ***Inspect:***

1. ventilation of attics and foundation areas2. 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 areas2. 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
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|  | ***3.*** | ***Complete a home inspection portfolio (ongoing)*** |
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| **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 |

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| **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.
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| **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: |

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|  | Grade | Definition | *Grade Point Equivalent* |
|  | 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 |
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|  | 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. |  |

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| **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. |

**HMI211**  **Home Inspection III – Course Plan**

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| Week | Outcomes | Format | Hrs | Topic / Content | Readings | Assignments | Assessment | Resources |
| 1 | Review | Lecture | 3 | Topic: Introduction History of home inspection / Standards of practiceDescription: Review and discussion of standards / report writing process / review of safetyApplication: CAHPI (OAHI) Standards of Practice | Standards of Practice and text pages as assigned by instructorDVD/ defect recognition / case studies | **Assignment...** preparation for quiz next week / readings | Weekly progress and review of questions /quiz / assignmentsSubmitted work review | CAHPI / OAHI / ASHI Standards of PracticeOAHI DVD of defect recognitionComplete Book of Home Inspection – N. BeckerInspecting a House - R. Cauldwell |
| 2-3-4 | 1.6, 2, 3 | Review LectureLab  | 1.55.52 |  Review assignment / **quiz** at beginning of each following class / review / discussion of answersTopic: **Electrical 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 shopi.e. speaker – ESA inspector /related building materials / discuss / performance  | Standards of Practice and text pages as assigned by instructorDVD/ defect recognition / case studies | **Field** **assignment** for next class – photos of electrical system / write up report **Assignment ...** preparation for quiz next week / readings | Weekly progress and review of questions /quiz / assignmentsSubmitted work reviewCompletion of electrical system report | As above and camera |

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| 5-6 | 1.7, 2, 3 | Review LectureLab  | 141 | Review assignment / **quiz** at beginning of each following class / review / discussion of answersTopic: **Heating 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 shopi.e. speaker – HVAC contractor / equipment / discuss / performance  | Standards of Practice and text pages as assigned by instructorDVD/ defect recognition / case studies | **Field assignment** for next class – photos of heating system / write up report**Assignment...** preparationfor quiz next week | Weekly progress and review of questions /quiz / assignmentsSubmitted work reviewCompletion of heating system report | As above and camera |
| 7 - 8 | 1.8, 2, 3 | Review LectureLab  | 141 | Review assignment / **quiz** at beginning of each following class / review / discussion of answersTopic: **Air Conditioning / Cooling / Heat pump 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 shopi.e. speaker – HVAC contractor / equipment / discuss / performance  | Standards of Practice and text pages as assigned by instructorDVD/ defect recognition / case studies | **Field assignment** for next class – photos of AC system / write up report **Assignment...** preparationfor quiz next week / readings | Weekly progress and review of questions /quiz / assignmentsSubmitted work reviewCompletion of AC system report | As above and camera |
| 9-10 | 1.10, 2, 3 | Review LectureLab  | 141 | Review assignment / **quiz** at beginning of each following class / review / discussion of answersTopic: **Mechanical and Natural Ventilation 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. view material / products in shopi.e. speaker – HVAC contractor / equipment / discuss / performance  | Standards of Practice and text pages as assigned by instructorDVD/ defect recognition / case studies | **Field assignment** for next class – photos of ventilation system / write up report **Assignment...** preparation for quiz next week / readings | Weekly progress and review of questions /quiz / assignmentsSubmitted work reviewCompletion of ventilation system report | As above and camera |
| 11-12 | 1.9, 2, 3 | Review LectureLab  | 141 | Review assignment/**quiz** at beginning of each following class / review / discussion of answersTopic: **Interior 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. view material / products in shopi.e. speaker – related building materials / discuss / performance test and review  | Standards of Practice and text pages as assigned by instructorDVD/ defect recognition / case studies | **Field assignment** for next class – photos of interior system / write up report Preparation for next week’s field trip(s) - 2 | Weekly progress and review of questions /quiz / assignmentsSubmitted work reviewCompletion of interior system report | As above and camera |
| 13  | 1, 2, 3 | LabGroup # 1Lab Group # 2 | 22 | Topic: **Field inspection of house** Description: inspection methodology / identify / describe / report deficiencies/ report writing process Application: practical application / photos / group discussion  | Standards of Practice and text pages as assigned by instructorDVD/ 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 / assignmentsSubmitted work review | As above and camera |
| 14-15  | 1, 2, 3 | LectureLab  | 33 | Topic: Practical application of field home inspection Description: inspection methodology / identify / describe / report deficiencies/ report writing process Application: 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 instructorDVD/ defect recognition / case studies | Test Week 15**Final assignment to be submitted** | Weekly progress review of questions /quiz / assignmentsSubmitted work review | As above and camera |
| 16 | 1, 2, 3 | Lecture  | 3 | Review / take up final testPresentation , sharing and discussion of final projects |  | Review and presentations |  |  |