|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **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 | | | | |
| Copyright ©2015 The Sault College of Applied Arts & Technology *Reproduction of this document by any means, in whole or in part, without prior* *written permission of Sault College of Applied Arts & Technology is prohibited.* | | | | | |
| *For additional information, please contact Corey Meunier, Chair* | | | | | |
| ***School of Technology & Skilled Trades*** | | | | | |
| ***(705) 759-2554, Ext. 2610*** | | | | | |

|  |  |
| --- | --- |
| **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 System*** |
|  |  | Potential 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*** | ***Interior*** |
|  |  | Potential 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 ventilation***  Potential 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 | 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 |
|  |  |  |  |
|  | 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. | |

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

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Week | Outcomes | Format | Hrs | Topic / Content | Readings | Assignments | Assessment | Resources |
| 1 | Review | Lecture | 3 | Topic: Introduction  History of home inspection / Standards of practice  Description: Review and discussion of standards / report writing process / review of safety  Application: CAHPI (OAHI) Standards of Practice | Standards of Practice and text pages as assigned by instructor  DVD/ defect recognition / case studies | **Assignment...** preparation for quiz next week / readings | Weekly progress and review of questions /quiz / assignments  Submitted work review | CAHPI / OAHI / ASHI Standards of Practice  OAHI DVD of defect recognition  Complete Book of Home Inspection – N. Becker  Inspecting a House - R. Cauldwell |
| 2-3-4 | 1.6, 2, 3 | Review  Lecture  Lab | 1.5  5.5  2 | Review assignment / **quiz** at beginning of each following class / review / discussion of answers  Topic: **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 shop  i.e. speaker – ESA inspector /related building materials / discuss / performance | Standards of Practice and text pages as assigned by instructor  DVD/ 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 / assignments  Submitted work review  Completion of electrical system report | As above and camera |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5-6 | 1.7, 2, 3 | Review  Lecture  Lab | 1  4  1 | Review assignment / **quiz**  at beginning of each following class / review / discussion of answers  Topic: **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 shop  i.e. speaker – HVAC contractor / equipment / discuss / performance | Standards of Practice and text pages as assigned by instructor  DVD/ 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 / assignments  Submitted work review  Completion of heating system report | As above and camera |
| 7 - 8 | 1.8, 2, 3 | Review  Lecture  Lab | 1  4  1 | Review assignment / **quiz** at beginning of each following class / review / discussion of answers  Topic: **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 shop  i.e. speaker – HVAC contractor / equipment / discuss / performance | Standards of Practice and text pages as assigned by instructor  DVD/ 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 / assignments  Submitted work review  Completion of AC system report | As above and camera |
| 9-10 | 1.10, 2, 3 | Review  Lecture  Lab | 1  4  1 | Review assignment / **quiz** at beginning of each following class / review / discussion of answers  Topic: **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 shop  i.e. speaker – HVAC contractor / equipment / discuss / performance | Standards of Practice and text pages as assigned by instructor  DVD/ 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 / assignments  Submitted work review  Completion of ventilation system report | As above and camera |
| 11-12 | 1.9, 2, 3 | Review  Lecture  Lab | 1  4  1 | Review assignment/**quiz** at beginning of each following class / review / discussion of answers  Topic: **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 shop  i.e. speaker – related building materials / discuss / performance  test and review | Standards of Practice and text pages as assigned by instructor  DVD/ 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 / assignments  Submitted work review  Completion of interior system report | As above and camera |
| 13 | 1, 2, 3 | Lab  Group # 1  Lab  Group # 2 | 2  2 | 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 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 | 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 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 |  |  |