Faculty members are required to have the outline submitted to the Academic Affairs Office. The course outline is the form used for approval of new courses by the Academic Affairs and Standards Council.

DEPT. PLHT  
COURSE NUMBER: 1135

NUMBER OF CREDITS: 2  Lecture: 1  Lab: 1

<table>
<thead>
<tr>
<th>Course Title:</th>
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<tbody>
<tr>
<td>Code II</td>
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<table>
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<tr>
<th>Catalog Description:</th>
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<tbody>
<tr>
<td>Build on knowledge learned in PLHT 1110 and apply this information to gain thorough understanding of Minnesota Plumbing Code. Course includes pipe sizing of residential homes, plumbing license requirements and practical testing to achieve the journeyman license.</td>
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FULFILLS MN TRANSFER CURRICULUM AREA(S)

Goal 1: Communication: ____ by meeting the following competencies:

Goal 2: Critical Thinking: ____ by meeting the following competencies:

Goal 3: Natural Sciences: ____ by meeting the following competencies:

Goal 4: Mathematics/Logical Reasoning: ____ by meeting the following competencies:

Goal 5: History and the Social and Behavioral Sciences: ____ by meeting the following competencies:

Goal 6: The Humanities and Fine Arts: ____ by meeting the following competencies:

Goal 7: Human Diversity: ____ by meeting the following competencies:

Goal 8: Global Perspective: ____ by meeting the following competencies:

Goal 9: Ethical and Civic Responsibility: ____ by meeting the following competencies:

Goal 10: People and the Environment: ____ by meeting the following competencies:

<table>
<thead>
<tr>
<th>Prerequisites or Necessary Entry Skills/Knowledge:</th>
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<td>None</td>
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### Topics to be Covered:
- Minnesota licensing laws, plumbing industry definitions, advanced plumbing principles
- General regulations, requirements and calculations for plumbing installations, potable water distribution systems, drain, waste and vent systems
- Requirements for design, size and selection of drain, waste and vent lines
- Reference standards for plumbing materials and installation
- Qualifications of licensed plumbers to secure State licensure

### Student Learning Outcomes
1) Interpret State licensing laws, plumbing and industry definitions.
2) Apply advanced plumbing principles.
3) Apply regulations, requirements and calculations for plumbing installations, potable water distribution systems and drain, waste and vent systems.
4) Design, size and select drain, waste and vent lines.
5) Employ standards for plumbing materials and installation.
6) Compute sufficient sizes for drain systems, storm sewers, water distribution systems and vent systems.

### Is this course part of a transfer pathway:
- Yes ☐
- No ☒

Revised Date: May 2020