## Course Outline

### DEPT. PLMB

**COURSE NUMBER:** 1180

<table>
<thead>
<tr>
<th>NUMBER OF CREDITS: 4</th>
<th>Lecture: 1 Lab: 3 OJT: 0</th>
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| **Course Title:** | Water Piping and Sizing |

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<thead>
<tr>
<th><strong>Catalog Description:</strong></th>
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<td>Water Piping and Sizing will familiarize the learner with water supply and distribution. The course will include Minnesota Plumbing Code rules for the sizing a water supply system. Drawing isometrics will be introduced. Students will apply knowledge and design and build systems utilizing different pipe sizes.</td>
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<tr>
<th><strong>Prerequisites or Necessary Entry Skills/Knowledge:</strong></th>
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<td>None</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:

### Topics to be Covered

- How building water supplies are distributes and supplied.

### Student Learning Outcomes

- Demonstrate knowledge of key points of water distribution per plumbing code.
- Demonstrate how to size the main water supply to a building.
- Demonstrate how to size the building water supply and branch lines.
- Demonstrate how to size a manifold header type water supply system.
- Demonstrate the ability to extrapolate information from the water distribution tables.
- Perform basic math functions in regards to friction loss atmospheric pressure and building.
Draw individual fixture water supply isometrics.
Draw fixture group water supply isometrics.
Draw a building main water supply and branch line isometrics.

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

Revised Date: 4/29/2024