# MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
## COURSE OUTLINE

<table>
<thead>
<tr>
<th>DEPT. CRPT</th>
<th>COURSE NUMBER: 1105</th>
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<tbody>
<tr>
<td>Number of Credits:</td>
<td>4</td>
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<tr>
<td>Lecture:</td>
<td>1 Lab: 3 OJT 0</td>
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### Course Title:
Floor and Wall Framing

### Catalog Description:
Floor and Wall Framing assists students in gaining hands-on experience laying out, building, straightening, bracing and leveling walls and floors. During lab activities they will lay out and erect the supporting structures for residential floor and wall components.

### Prerequisites or Necessary Entry Skills/Knowledge:
None

### FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)
- **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 (General)
- Common materials used for floor and wall components including engineered lumber.
- Layout of sills, floor joists, header joists and trimmer joists.
- Function of floor joist bridging and/or solid blocking and strongbacks.
- Subfloor materials and their application.
- Use of a story pole as an aid for vertical layouts.
- The layout of exterior and interior walls on the subfloor.
- Stud layout on sole and top plates.
- Types of headers and their construction.
- Calculating rough opening sizes of windows and doors.
- Common materials used for wall sheathing and their application.
## Student Learning Outcomes

- Explain the difference between platform and balloon framing
- Identify the main parts of a platform frame.
- Calculate the load on girders and beams used in residential construction.
- Lay out and install sills on a foundation wall.
- Describe how layouts are made on header joists.
- Describe kinds of material used for subflooring.
- Identify components of wood frame wall.
- Lay out and install floor joists on a sill.
- Explain the function of bridging and solid blocking used with floor joists.
- Lay out and install studs, king studs, trimmer studs, and cripple studs on wall plates.
- Measure, cut and install window and door headers.
- Install subfloor on floor joists.
- Use a story pole to do vertical layout of plates, headers, and window sills.
- Apply exterior sheathing to a wall section.

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

*If yes, please list the competencies below

Revised Date: 1/2022