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. CRPT

COURSE NUMBER: 1105

NUMBER OF CREDITS: 4  Lecture: 1  Lab: 3

Course Title:
Floor and Wall Framing

Catalog Description:
Students gain 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.

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:

Prerequisites or Necessary Entry Skills/Knowledge:
None
### Topics to be Covered

- 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

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

### Is this course part of a transfer pathway?

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Revised Date: May 2020