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: 2271

NUMBER OF CREDITS: 3 Lecture: 3 Lab: 0

**Course Title:**
Construction Drafting, Design and Blueprint Reading

**Catalog Description:**
Introduce the students to the basic principles of mechanical drafting, architectural drafting and the design of floor plans. Auxiliary views, cross sections and elevation views will also be studied and drawn. Students will have the opportunity to learn both hand drafting methods and computer aid drafting. The student will be taught the skills needed to accurately read and interpret a complete set of working drawings for residential and light commercial construction projects.

**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:**

- Reading a scale
- Drawing layout styles
- Standard dimensioning requirements
- Drafting symbols
- Drafting tools and drawing aids
- Drawing plot plans, foundation plans, floor plans, elevations, sections and detail plans
- Styles of residential houses
- Kitchen and bath designs
- Computer aided drafting software (CAD)
- Working drawings done with CAD
- Reading and interpreting blueprints or working drawings

**Student Learning Outcomes**

1) Identify and demonstrate proper use of scales used in architectural drafting.
2) Demonstrate use of drafting board and drafting tools to draw plot plans, foundation plans, floor plans, elevations and section drawing.
3) Identify symbols used in architectural drafting.
4) Identify building code requirements for residential construction projects.
5) Identify and discuss different styles of residential houses.
6) Identify various kitchen and bath designs and draw cabinet details of each.
7) Demonstrate the use of CAD to draw plot plans, foundation plans, floor plans, elevations, section drawings and detail plans.
8) Produce blue prints using an Architectural plotter.

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

Yes ☐ No ☒

Revised Date: May 2020