MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE
COURSE OUTLINE

Faculty 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 Collegewide Curriculum Committee.

DEPT.  Plumbing                  COURSE NO.  PLMB 1130

COURSE TITLE  Blueprint Reading and Estimating

CATALOG DESCRIPTION This course will give the student a good back round in blueprint reading, drawing techniques, material usage, specifications and the necessity of good estimating skills.

AUDIENCE  To plumbing students considering a career in plumbing to understand blueprints and their meaning.

FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)
Area      : by meeting the following competencies:
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PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE: none

LENGTH OF COURSE 1 semester, 2 days a week 16 weeks

THIS COURSE IS USUALLY OFFERED:
Every other year ☐  fall☒  spring☐  summer ☐  undetermined ☐

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT: The student will achieve the first level of knowledge and skill needed to read blueprints.
2) THINKING SKILLS: The student will accurately read and show locations on blueprints.
3) COMMUNICATIONS SKILLS: The student will begin to demonstrate appropriate communication techniques among fellow plumbers and industry.
4) HUMAN DIVERSITY: The student will gain self-awareness regarding their feelings toward people of different cultures, value systems and socioeconomic status.

TOPICS TO BE COVERED: The design and construction standards for both residential and commercial plans, symbols, and specifications for the building trade.

LIST OF EXPECTED COURSE OUTCOMES:
1. describe estimating procedures
2. describe topographic contour design
3. describe plumbing system blueprints
4. describe masonry blueprints
5. describe footing/foundation detail
6. describe job/sea level elevation
7. describe construction drawings
8. describe commercial construction material
9. describe construction specifications
10. define blue print terms
11. demonstrate honesty
12. identify blueprint schedule
13. solve construction problems
14. identify welding symbols
15. identify plumbing symbols
16. identify HVAC symbol

LEARNING/TEACHING TECHNIQUES used in the course are:

- Collaborative Learning
- Problem Solving
- Student Presentations
- Interactive Lectures
- Creative Projects
- Individual Coaching
- Lecture
- Films/Videos/Slides
- Demonstrations
- Lab

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:

- Reading
- Tests
- Individual Projects
- Oral Presentations
- Worksheets
- Collaborative Projects
- Textbook Problems
- Papers
- Portfolio
- Group Problems
- Term Paper
- Other (describe below)

EXPECTED STUDENT LEARNING OUTCOMES: Same as above

The information in this course outline is subject to revision

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or Minnesota Relay Service at 800-627-3529 or by using your preferred relay service.

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