COURSE INFORMATION FORM

DISCIPLINE  CIMM
COURSE TITLE  Capstone – Job Planning, Benchwork & Layout
CR.HR.  1  LECT HR.  .5  LAB HR.  1  CLIN/INTERN HR.  _______  CLOCK HR.  _______

CATALOG DESCRIPTION

Students receive NIMS Level I Credentials in Job Planning, Benchwork, and Layout upon successful completion of the performance tests and theory exams. NIMS documents the skills of the individuals through the skill standard developed through a consortium.

PREREQUISITES

CIMM 100 and 105

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)

Upon completion of this course, the student will be able to:

1. Demonstrate and practice appropriate industrial machining safety.
2. Tap a hole to drawing specifications.
3. Cut a stud bolt to drawing specifications.
4. Press fit a bushing to drawing specifications.
5. Bench chamfer edges to drawing specifications.
6. Apply layout ink.
7. Lay out parallel lines to drawing specifications.
8. Lay out perpendicular lines to drawing specifications.
9. Lay out arcs and radius to drawing specifications.
10. Lay out holes to drawing specifications.
11. Center punch centers of holes to drawing specifications.
GENERAL EDUCATION OUTCOMES (ESO)
Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>ESO</th>
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PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES
Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Students will demonstrate the ability to apply foundational skills in an industrial setting, safely and to industry guidelines.
2. Students will think critically and apply problem-solving skills.
3. The program will graduate individuals who exhibit competence in the entry-level skills of technical profession machining and manufacturing.

CLASS-LEVEL ASSESSMENT MEASURES
Student accomplishment of expected student outcomes may be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

Exams: 1 – 11
Lab Projects: 1 - 11
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An *asterisk can be used to mark an item as optional.

I. National Institute for Metalworking Skills (NIMS)
   A. Overview
   B. NIMS registration
   C. NIMS special credentials

II. Performance evaluation procedures

III. Related theory, credentialing exam procedures

IV. Machine tool technology safety

V. Credentials
   A. Job planning credentials
   B. Benchwork credentials
   C. Layout credentials