

DATE SUBMITTED 11/24/09
DATE DICC APPROVED 2/23/10

CATALOG NO. MATE 131
DATE LAST REVIEWED _____

COURSE INFORMATION FORM

DISCIPLINE MATE
COURSE TITLE NIMS Level I Credentials – 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

MATE 100, 101 or MATE 130, MATE 115 and MATH 103

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. Layout parallel lines to drawing specifications.
8. Layout perpendicular lines to drawing specifications.
9. Layout arcs and radius to drawing specifications.
10. Layout 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.

1.

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, safety 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 manufacturing technology.

CLASS-LEVEL ASSESSMENT MEASURES

Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

Completion of a safety exam with 100% accuracy and exhibit appropriate safety in the operation and completion of NIMS Level I projects: (1)

Completion of the Machining Skills Level-1 Job 2.1 Benchwork project at 100% accuracy and successful completion of the related theory test: (2-5)

Completion of the Machining Skills Level-1 Job 2.2 Manual Operation, Layout project at 100% accuracy and successful completion of the related theory test: (6-11)

COURSE OUTLINE FORM

DISCIPLINE MATECOURSE TITLE: NIMS Level I Credentials – Job Planning, Benchwork & Layout

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. 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