COURSE INFORMATION FORM

DISCIPLINE
COURSE TITLE
CIMM
Basic Mill Operation

CR.HR. 1    LECT HR. .5    LAB HR. 1    CLIN/INTERN HR.    CLOCK HR.    

CATALOG DESCRIPTION

This course covers the safe use and proper operation of a manual mill. This course is designed for students in engineering disciplines. It serves as a prerequisite for supervised use of the Engineering Student Machine Shop and serves as a prerequisite for all UMKC Engineering Lab courses.

PREREQUISITES

CIMM 101 or concurrent enrollment

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)

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

2. Calculate speeds and feeds for milling operations.
3. Identify the main parts of and describe how a milling machine operates.
4. Demonstrate basic machine care and maintenance.
5. Understand the terminology used in a manufacturing environment in order to communicate effectively.
6. Acquire personal experience operating machine shop mill equipment and gain knowledge of basic mill operations.
7. Understand the capabilities of mills commonly used in prototype fabrication.
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.

Outcomes | ESO
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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.

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.)

1. Written and Application Exams (1-7)
2. Assignments/Lab projects (1-7)
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. Nomenclature of machine
II. Various controls of mills
III. Preparation and best practices of machine use
IV. Installation of vises and other work-holding devices
V. Basic milling, drilling, slotting, counterboring, countersinking, and squaring of work-pieces