

SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE. MARIE, ONTARIO

COURSE OUTLINE

Course Title: BASIC DIE MAKING

Code No.: MCH 245

Program: MECHANICAL ENGINEERING TECHNICIAN (MACHINING)

Semester: FOUR

Date: FEBRUARY, 1987

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New: X Revision:

APPROVED:

R. Zuccato
Chairperson

87-02-25
Date

BASIC DIE MAKING

MCH 245

Course Name

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PHILOSOPHY/GOALS:

The students in this program have at this point in their training a sound understanding of Machining. Basic die making is intended to put this knowledge to work in the manufacture of a die. S/he will learn the fundamentals and working principles of die building. One die will be built in each class and each student will have an opportunity to work on it.

METHOD OF ASSESSMENT (GRADING METHOD):

Attendance, initiative, co-operation, ability	50%
Class test	50%

NOTE: The student will lose 1% of final mark for every hour absent or late.

TEXTBOOK(S):

BASIC DIE MAKING - MCH 245

OBJECTIVES:

To familiarize the student with the manufacture of and working principles of dies.

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE
1	3	Main Presswork Operations: Blanking Piercing Bending or Forming Drawing Coining Crimping Deep drawing Ironing	Lecture/Notes
2	3	Miscellaneous Operations: Shaving Sizing or Burnishing Straightening Notching Numbering Broaching Riveting Seaming Staking	Lecture/Notes
3	3	Presswork Materials Steel Brass Copper	Lecture/Notes
4	3	Location of Blanks: To save material To secure good bending etc.	Lecture/Notes
5	3	Punch and Die Mountings: Standard die sets Subpresses Main press only (punch & die must be located at each set-up)	Lecture/Notes

TOPIC NO.	PERIODS	TOPIC DESCRIPTION	REFERENCE
6.	3	Standard Die Sets & Parts Shank Leader or guide pins Bushings Locating Stop Stripper plate Knock out pin	Lecture/Notes
7	3	Die Set Dimensions Type A, B, C	Lecture/Notes
8	3	Inverted Dies	Lecture/Notes
9	3	Progressive Dies	Lecture/Notes
10	3	Compound Dies	Lecture/Notes
11	3	Stock Stops	Lecture/Notes
12	3	Strippers & Pressure Pads	Lecture/Notes
13	3	Stripper Bolts	Lecture/Notes
14	3	Clearances: Angular die clearance Punch or die shear	Lecture/Notes
15	3	Blanking Pressure	Lecture/Notes