

SYLLABUS  
PART I  
EDISON STATE COMMUNITY COLLEGE  
MFG 252S DIE CONSTRUCTION  
3 CREDIT HOURS

**COURSE DESCRIPTION**

Cutting and forming facts explained and related to the manner in which dies must function in order to achieve the desired results. Primary components such as punches, punch plates, die blocks, strippers, etc. are discussed as individual entities as well as their function as part of the completed die. Use of stock material with minimal waste is discussed along with the reasoning behind optimum stock-strip configurations. Prerequisite: MFG-251S.

**COURSE GOALS**

The student will:

Bloom's Level		Program Outcomes
3	1. Identify and apply appropriate dimensional values to interfacing die parts.	7
2	2. Identify the cause of a bad part from cut or press analysis.	7
3	3. Show an application of part progression in relation to strippers, blocks, and stops.	7
5	4. Prioritize layout activity procedures in relation to die punching, piercing, and cutting processes.	7, 8
6	5. Construct a set of die quality springs demonstrating comprehensive spring knowledge.	1, 2, 3

**CORE VALUES**

The Core Values are a set of principles that guide in creating educational programs and environments at Edison. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

**TOPIC OUTLINE**

1. Elementary Blank and Pierce Dies
2. Bending
3. Holes and Pilots
4. Punches and Punch Plates
5. EDM Die Sections
6. Nest Gages
7. Pushers and Die Stops
8. Die Sets
9. Pressure Pads, Strippers, and Stock Guides
10. Shedders and Knockouts
11. Metallic Springs as Die Pressure Devices