



ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Workforce Development

COURSE: MET 1205 Tooling Processes II

Date: Spring 2023

Credit Hours: 3

Complete all that apply or mark "None" where appropriate:

Prerequisite(s): MET 1204 with a grade of C or better

Enrollment by assessment or other measure? Yes No

If yes, please describe:

Corequisite(s): None

Pre- or Corequisite(s): None

Consent of Instructor: Yes No

Delivery Method:	<input checked="" type="checkbox"/> Lecture	2 Contact Hours (1 contact = 1 credit hour)
	<input type="checkbox"/> Seminar	0 Contact Hours (1 contact = 1 credit hour)
	<input checked="" type="checkbox"/> Lab	2 Contact Hours (2-3 contact = 1 credit hour)
	<input type="checkbox"/> Clinical	0 Contact Hours (3 contact = 1 credit hour)

Offered: Fall Spring Summer

CATALOG DESCRIPTION and IAI NUMBER (if applicable):

This course is a continuation of MET 1204. Students will further develop their understanding of press tool processes. Emphasis in this course shifts from simple secondary type tooling to more complex progressive dies. Students will help design and build a working progressive die.

ACCREDITATION STATEMENTS AND COURSE NOTES:

None

COURSE TOPICS AND CONTENT REQUIREMENTS:

1.0 Strip Layout , Material Utilization

2.0 Feed Progression

3.0 Die Design

4.0 Feeds

5.0 Power Presses

6.0 Die Construction

7.0 Tool Steels

Lab - Advanced Topics in Lathe Operations, Milling Machine Operations

INSTRUCTIONAL METHODS:

Lecture

Demonstration

Hands on Lab

EVALUATION OF STUDENT ACHIEVEMENT:

Quizzes

Tests

Comprehensive Final

Lab projects

INSTRUCTIONAL MATERIALS:

Textbooks

Industrial Press Inc., Die Design Fundamentals, Third Edition, by Boljanovic and Paquin

Resources

PowerPoint slides

LEARNING OUTCOMES AND GOALS:

Institutional Learning Outcomes

- 1) Communication – to communicate effectively;
- 2) Inquiry – to apply critical, logical, creative, aesthetic, or quantitative analytical reasoning to formulate a judgement or conclusion;
- 3) Social Consciousness – to understand what it means to be a socially conscious person, locally and globally;
- 4) Responsibility – to recognize how personal choices affect self and society.

Course Outcomes and Competencies

1. Furthering knowledge of the intricacies of punch press dies in the field of metal stamping.
2. Understanding the pros and cons of progressive tooling as opposed to secondary operations of punch press dies.
3. To provide more in depth hands-on opportunities in areas of die making and pertaining to design, tolerances, fits, construction sequences, and die assembly.