

NIRMA UNIVERSITY
INDUSTRIAL DESIGN PROGRAM
Bachelor of Design, Department of Design
Year II, Semester IV

L	T	P	C
		3	2

Course Code	DSK 228
Course Title	Materials & Processes II- Plastics

Course Learning Outcomes (CLO):

At the end of the course the student will be

1. Equipped to understand plastics as a material, various compositions of plastics available currently and their application in current context
2. Understand methods of making consumer and industrial products using various manufacturing techniques for plastics

Syllabus:

Teaching hours: 45

Unit 1 Introduction to various kinds of plastics

Teaching hours: 6

Unit 2 Various methods of producing plastic goods

Teaching hours: 24

- 2.1 Injection Moulding, Extrusion Moulding, Blow Moulding
- 2.2 Dye Casting, Mould Making & Master making
- 2.3 Fabrication, Thermo- forming etc.
- 2.4 Documentation of various processes seen through Industry visits

Unit 3 Practice based studio work

Teaching hours: 12

3.1 Exploration & Fabrication of simple forms & objects using variety of processes, including bonding, carving, cutting, sticking, turning and welding

Unit 4 Plastics & Environment; issues of sustainable practice

Teaching hours: 3

Suggested Readings:

1. Plastic Dreams by Charlotte and Peter Fiell
2. Industrial Design Reference & Specification Book: Dan Cuffaro, Isaac Zaksenberg
3. I Am Plastic: The Designer Toy Explosion by Paul Budnitz

w.e.f. Academic year _2018 and onwards

Key: L= Lecture, T= Tutorial, P= Practical, C= Credit