

NIRMA UNIVERSITY

Department of Design

(B.Des.)

(1st Year / Semester 1)

| L | T | P | C |
|---|---|-----|---|
| | | 4.5 | 3 |

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| Course Code | DSK115 |
| Course Title | Introduction to Basic Materials I |

Course Learning Outcomes (CLO):

Materials are one of the most basic resources for designers to give tangibility to their concepts and ideas. In this context it becomes important for them to understand the various kinds of materials that they can use, know their properties, the processes and the tools and their interrelationships required to work on them. New materials, processes and tools keep getting developed and it becomes relevant for the students to learn the method and pedagogy of understanding the materials, processes and the tools and techniques involved so that they can get confidence to work with any material, processes, tools and techniques known or new. It is also important for the students to develop sensitivity to experience the properties of different materials to get comfortable to interact with the world around filled with materials.

Syllabus:

Teaching hours: 67.5

Introduction to basic forms - solid, sheet, clay and linear form.

Wood removal of material, understanding the grain structure and the form exploration. Sheet metal and plastic - shaping and forming, space filling possibility.

Clay - molding and shaping (pinching, slab work and coiling.)

Linear materials (rope, metal wire)- exploring tension properties. Techniques that can lead to surface and volume generation.

Introduction to hand tools across the workshops

Suggested Readings^:

- Basic Workshop Practice, Author Name: Kogent Learning Solutions Inc.
- Westermann Tables for the Metal Trade Book by John Wiley & Sons
- Workshop Technology Volume 1, 5th Edition by W. Chapman

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

w.e.f. academic year 2017_____ and onwards