NIRMA UNIVERSITY FOUNDATION PROGRAMME

Bachelor of Design, Department of Design Year I, Semester II

L	T	P	C
		4.5	3

Course Code	DSK 125
Course Title	Introduction to Basic Materials II

Course Learning Outcomes (CLO):

The course objective is to introduce learners to natural and human created materials, techniques of construction and processes used to convert materials into forms

To discover properties of materials by 'doing'

Introduction to hand tools, their functions and their use.

Syllabus: Teaching hours:45

Wood:

Learning all that is possible to do in wood-natural and sunthetic-sawing, cutting, planning, drilling, chiselling, shaping, inlaying, moulding etc.

Introduction to working on a wood lathe

Introduction to basic wood joineries

Metal:

Introduction to Wire & Rods-twisting, forging etc

Introduction to Sheet Metal: Pressing, Bending, Forming, Shaping, Perforating

Introduction to Solid Rods: Lathe Work demonstration & making of a 'master' for casting/ moudling (As part of field Visits)

Suggested Readings:

- 1. Handmade in India by Aditi and M P Ranjan, Mapin Publishers Pvt. Ltd, 2007
- 2. Understanding Wood: A Craftsman's Guide to Wood Technology by R. Bruce Hoadley, Taunton Press 2003
- 3. What wood is that? A manual of wood identification by Herbert Lesson Edlin, Viking Press, 1969
- 4. Identifying Wood: Accurate Resilts with simple Tools, by R Bruce Hoadley Tanton Press 1990
- 5. Wood: Identification and Use by Terry Potter, Guild of Master Craftsmen, 2004
- 6. Metal Techniques for Craftsmen: A basic manual on the methods of Forming and decorating Metals, by Oppo Untracht, Publisher: Robert Hale, 1985
- 7. Complete Metalsmith by Tim McCreight, Publisher: Davis 2005
- 8. Creative Metal Forming by Betty Helen Longhi, Cunthia Eid, Publisher: Brynmorgen Press 2013
- 9. The Art of Enameling: Techniques, Projects, inspiration by Linda Darty, Publisher: Lark Crafts, 2006
- Metal Techniques of Bronze Age Masters: All Chained Up, By Victoria Lansford, Publisher: Spiral Publishing Inc, 2008

w.e.f. Academic year _2017 and onwards

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