

SYLLABUS :-

Prerequisite - none General Introduction to Patterning; Lithography Techniques, Applications of Patterned polymer surfaces, Soft Lithography: key concepts, major techniques, Thin Film instability: Physical origin of Instability, Wetting and dewetting, Length Scales, Linear Stability Analysis, Pattern Formation. Pattern Directed and confined dewetting. Elastic Contact Instability: concepts, governing equations, Elastic contact Lithography, Bilayers. Electric Field and Thermal gradient induced patterning. Stress Engineering. Text Book: 1. *Alternative Lithography*, C. M. Sotomayor Torres (Ed.), Kluwer Academic Press, 2003. a. *Nanoscale Science and Technology*, Robert Kelsall, Ian Hamley and Mark Geoghegan, Wiley, 2007.