

PMR (262)487

Polymer Technology Laboratory

1(0/0-1/3)

Prerequisite

Concurrent to PMR 481

Course Description

Polymer forming by injection molding, polymer forming by compression molding, polymer sheet vacuum thermoforming, polymer powder coating by fluidization, monofilament wet spinning, monofilament melt spinning and fiber stretching, reinforced-polymer fabrication, mechanical testing of polymer, rheology of polymer, and epoxy resin casting.

Objective

Students will be experienced with polymer product forming techniques, mechanical and physical testings.

Course Content

Laboratory Hours

1. Polymer forming by injection molding	6
2. Polymer forming by compression molding	6
3. Polymer sheet vacuum thermoforming	3
4. Polymer powder coating by fluidization	3
5. Monofilament wet spinning	3
6. Monofilament melt spinning and fiber stretching	6
7. Reinforced-polymer fabrication	6
8. Mechanical and physical testing of polymer	6
9. Rheology of polymer	3
10. Epoxy resin casting	3
Total	45