



COURSE SYLLABUS

DIVISION: Workforce Services Revised: January 2015

CURRICULA IN WHICH COURSE IS TAUGHT: Polymer

COURSE NUMBER AND TITLE: IND 180 – Introduction to Plastic and Plastic Procedures

CREDITS: 3 HOURS/WEEK LECTURE: 3

HOURS/WEEK LAB: 0 LECTURE/LAB COMBINATION: 3(0)

I. CATALOG DESCRIPTION: Examines the characteristics and capacities of different plastics and the evolution of plastics and plastic processing equipment. Compares different processing technologies.

- II. RELATIONSHIP OF THE COURSE TO CURRICULA OBJECTIVES IN WHICH IT IS TAUGHT: Required in the Polymer program
- III. REQUIRED BACKGROUND: None
- IV. COURSE CONTENT:
 - > Introduction to Plastic Processing Industry
 - > Thermoplastics and Thermosets
 - > Description
 - Classification
 - Properties of common plastics and processes
 - Current Trends in Industry
 - ➤ Basics of the different plastic processes.

IV. LEARNER OUTCOMES:

Upon completion of this course, the student should be able to:

Describe the differences between a thermoplastic and a thermoset material, and the typical properties of each

Explain the major manufacturing processes used in the Plastics Industry, including extrusion, injection molding, thermoforming, and blow molding

V: EVALUATION

- Homework/class work
- Ouizzes
- Tests
- Midterm exam
- Final exam
- Class Participation

The course supports the following objectives:

DCC Educational Objectives

- Communication
- Critical Thinking
- ➤ Computational and Computer Skills