Butler Community College
Business Technology and Workforce
Development Division

Frank Robinson
Revised Spring 2006
Implemented Fall 2006

COURSE OUTLINE
Plastic and Adhesives II

Course Description
AB 125. Plastic and Adhesives II. 2 hours credit. Prerequisite: AB 101 and AB 115 with a C or better. This course will enable the student to repair flexible and rigid plastic parts. Safety during mixing and handling of chemical will be emphasized.

Course Relevance
The principles learned in this course will allow the student to understand and utilize the techniques and methods necessary to repair auto body non-structural (removable) parts with plastic and adhesives. These techniques and methods are essential for those aspiring to work in the auto body repair profession. This course and subsequent courses will be taught according to NATEF (National Automotive Technicians Education Foundation)/ASE (Automotive Service Excellence) standards.

Required Materials
Duffey, J., (2004). *Auto body repair technology* (4th ed.). Albany, NY: Delmar Publishing

Learning Outcomes
The intention is for the student to be able to
1. Determine the type of flexible plastic and make proper repair
2. Determine the type of rigid plastic and make the proper repair
3. Repair plastic parts with two part adhesive
4. Safely handle chemicals
5. Apply personal and environmental safety practices

Primary Learning PACT Skills that will be DEVELOPED and/or documented in this course
Through the student's involvement in this course, he/she will develop his/her ability in the following primary PACT skill areas:
1. Field Related Technology
   - Through the use of current industry standards and technology, the student will identify the materials, tools, and equipment to properly perform collision repair using plastic and adhesives.

Secondary skills (developed but not documented):
Health Management
Reading

Major Summative Assessment Task(s)
These learning outcomes and the primary Learning PACT skills will be demonstrated by
1. Preparing and repairing a flexible and a rigid plastic part

Course Content

I. Themes – Key recurring concepts that run throughout this course:
   A. Safety
   B. Quality
II. Issues- Key areas of conflict that must be understood in order to achieve the intended outcomes:
   A. Assessing types of material to repair plastic
   B. Determining cost of repair
III. Concepts – Key concepts that must be understood to address the issues:
   A. Determine the integrity of the repair
   B. Determine paintability of repair
IV. Skills/Competencies – Actions that are essential to achieve the course outcomes:
   A. Replace or repair rigid, semi-rigid, and flexible plastic panels according to manufactures/industry specifications. High Priority-General (HP-G)
   B. Safely handling chemicals

Learning Units

I. Determine repairability of rigid plastic parts
   A. Determine types of chemical (adhesive) for repair
   B. Determine types of preparation for repair
   C. Determine curing time for adhesive

II. Determine reparability of flexible plastic
   A. Determine type of chemical (adhesives) for repair
   B. Determine types of preparation for repairs
   C. Determine curing time for adhesives

Learning Activities

Learning activities will include lectures, demonstration, and performance. Classroom lecture is designed to enable the student to understand the key principles in auto body repair.

Grade Determination

The student will be graded on completion of assessment tasks learning activities, and written assignment and examinations.