

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: DNL 138

Credits: 6

Course Title: Introduction to Fixed Prosthodontics

Course Description: Introduces students to fixed prosthodontic restorations. The student practices the techniques of die preparation and the fabrication of inlays, crowns, and fixed partial dentures utilizing gold alloy, shaded acrylic, and composite materials. Students observe fabrication procedure demonstrations and receive one-on-one instruction during part of the laboratory sessions. Lecture 3 hours. Laboratory 9 hours. Total 12 hours per week.

General Course Purpose: Students must learn fixed prosthodontic skills in order to function as a dental lab technician in a commercial dental laboratory setting.

Course Prerequisites and Co-requisites:

Prerequisites: General admission to the college. An interview with the program head is required to determine interest, motivation, and aptitudes related to dental laboratory activities.

Course Objectives:

Upon completing the course, the student will be able to:

- a. Define terminology and nomenclature as it relates to fixed prosthodontics;
- b. Describe fabrication procedures for various types of fixed restorations; and
- c. Explain and list the biological considerations and practical application of fixed restorations.

Major Topics to Be Included:

- a. Fundamentals of pouring dental models, removable die preparation and trimming
- b. Waxing techniques, application and contouring and morphology
- c. Spring and investing techniques
- d. Burnout and casting procedures using appropriate protocol
- e. Pontiac design, materials and connectors
- f. Resistance, retention, retainer designs
- g. Soldering using consecutive steps and materials manipulation
- h. Composite veneering to metal substructures
- i. CAD/CAM design and computer applications
- j. Porcelain fused to metal design

Effective Date of Course Content Summary: August 22, 2008