

**PALOMAR COLLEGE**  
**COURSE OUTLINE OF RECORD FOR**  
**DEGREE CREDIT COURSE**

\_\_\_\_\_ Transfer Course   X   A.A. Degree applicable course  
(check all that apply)

**COURSE NUMBER AND TITLE:** DA 85 – Advanced Dental Procedures

**UNIT VALUE:** 4

**MINIMUM NUMBER OF SEMESTER HOURS:** 128

**BASIC SKILLS REQUIREMENTS:** Appropriate language skills

**ENTRANCE REQUIREMENTS**

**PREREQUISITES:** DA 50; DA 60; DA 75; proof of Hepatitis B Immunization; and EME 55 or current BLS for Healthcare Providers Certificate.

**COREQUISITE:** None

**RECOMMENDED PREPARATION:** None

**SCOPE OF COURSE:**

Advanced laboratory and clinical experience focusing on basic skills previously learned. Emphasis is placed on 1) clinical use of impression materials for obtaining study models, 2) pouring and trimming plaster and stone models, 3) fabrication of custom trays for preliminary impressions, 4) fabrication of provisional restorations and 5) advanced prosthodontics and orthodontic instruction. *Graded only.*

**SPECIFIC COURSE OBJECTIVES:**

The successful student will:

- I. Placement and Removal of Rubber Dam, Matrix and Wedge
  - A. Compare and contrast reasons for and against using rubber dam in dental procedures.
  - B. Identify instruments used in preparing and removal of rubber dam and explain their uses.
  - C. Demonstrate laboratory proficiency in application and removal of rubber dam.
  - D. Evaluate possible problems in placement of rubber dam.
  - E. Explain commonly used matrices.
  - F. Demonstrate laboratory proficiency in application and removal of the Universal Matrix band and retainer.
- II. Study Models (Rubber Molds)
  - A. Prepare and mix plaster for pouring
  - B. Demonstrate proper application of the mixed plaster to the rubber molds
  - C. Separate and evaluate the completed project to be free of bubbles
  - D. Evaluate completed project prior to instructor evaluation
- III. Study Models (Alginate)
  - A. Select and prepare a tray for an alginate impression

1. First on typodonts
2. Second on human, utilizing classmate(s)
- B. Mix and perfect impression technique for study casts
  1. First on typodont
  2. Second on human, utilizing classmate(s)
- C. Separate and evaluate for accuracy of reproduction
- D. Evaluate project prior to instructor evaluation
- IV. Pour Study Model Casts (clinical models)
  - A. Assemble appropriate materials
  - B. Prepare impressions for pouring
  - C. Prepare plaster mix
  - D. Form bases adequate for trimming
  - E. Separate models (casts)
  - F. Check for bubbles in casts and anatomical detail
  - G. Evaluate final project for instructor evaluation
- V. Trimming and Polishing Study Casts (clinical models)
  - A. Prepare models for trimming
  - B. Utilize protractor and pencil to "outline" cuts before trimming
  - C. Recognize and perform appropriate safety measures
  - D. Trim models
  - E. Fill bubbles, remove pencil mark, final sand and soak
  - F. Obtain and trim bite registration
  - G. Evaluate final project for instructor evaluation
- VI. Preliminary Impression of an Edentulous Model
  - A. Prepare impression material for impression tray
  - B. Demonstrate application of material to the appropriate tray
  - C. Apply impression material to the model
  - D. Separate and evaluate impressions for instructor evaluation
- VII. Pouring Edentulous Master Cast
  - A. Prepare class I stone for mixing
  - B. Mix and apply stone to impression tray
  - C. Separate cast from impression
  - D. Evaluate finished project for instructor evaluation
- VIII. Self-Cured Acrylic Impression Trays
  - A. Prepare acrylic resin and identify its usage
  - B. Prepare the model for proper adaptation
  - C. Mix the acrylic resin to manufacturers specifications
  - D. Adapt the acrylic to the stone model
  - E. Trim and perforate the tray
  - F. Polish tray on lathe
  - G. Evaluate for instructor evaluation
- IX Prosthodontics
  - A. Identify and explain fixed prosthesis
    1. Full cast metal crowns
    2. Full cast ceramco crowns
    3. Inlays and onlays
    4. Fixed bridges
    5. Bonded veneers
    6. Cementation
  - B. Identify and explain removable prosthesis
    1. Implants

2. Partial dentures
  3. Full dentures
- X. Fabrication of Provisional Restorations
- A. Place and remove temporary sedative dressings
  - B. Construct and cement custom acrylic temporary crowns
  - C. Size and cement preformed metal temporary crowns
  - D. Remove temporary crowns
  - E. Construct and cement a temporary custom bridge
- XI. Orthodontics
- A. Explain the purpose and situations in which orthodontic treatment is indicated and contraindicated.
  - B. Explain the main categories of orthodontic treatment.
  - C. Identify armamentarium for orthodontic procedures.
  - D. Identify orthodontic instruments and their functions.
  - E. Explain the uses of a facebow and headgear.
  - F. Explain items involved in a case presentation.
  - G. Compare and contrast fixed and removable orthodontic appliances.
  - H. Explain the principles of tooth movement.
  - I. Identify and explain characteristics of removable orthodontic appliances such as
    1. Space maintainers
    2. Headgear and neckgear
    3. Positioners
    4. Retainers (fixed and removable)
  - M. Provide instructions for removable and fixed orthodontic appliances.
    1. Arch circumference
    2. Arch width
    3. Arch length
    4. Individual tooth size
    5. Overbite and overjet
  - J. Identify, Select and Place
    1. Elastic separators
    2. Mechanical (metal) separators
  - O. Presize and select orthodontic bands
  - P. Remove cement from orthodontic bands
  - Q. Check for loose bands
  - R. Place and remove arch wires
  - S. Ligate and arch wire

**CONTENT IN TERMS OF SPECIFIC BODY OF KNOWLEDGE:**

Students will demonstrate proficiency in working with restorative materials, temporary crowns, impression techniques, gypsum products, cements for temporary and fixed restorations, and orthodontic procedures.

- I. Study Models Using Rubber Molds
  - A. Plaster model using edentulous molds
- II. Study Models from Alginate Impressions (obtained on classmate[s])
  - A. Alginate impressions
  - B. Pouring alginate impressions
  - C. Trimming and polishing study models
- III. Custom Impression Trays
  - A. Self-cured acrylic impression trays

- IV. Fixed and Removable Prosthesis
  - A. Casting procedures
  - B. Cementation
  - C. Removal of supra-gingival cements
- V. Fabrication of provisional restorations
  - A. Sedative dressings
  - B. Acrylic preformed and custom crowns
  - C. Metal preformed crowns
  - D. Cementation (placement & removal)
  - E. Custom acrylic bridge
- VI. Orthodontic Procedures
  - Take intraoral measurements to determine:
    - A. Placement & removal of elastic and metal separators
    - B. Selection, sizing and preparing bands and brackets for bonding
    - C. Remove cement from orthodontic bands
    - D. Check for loose bands
    - E. Place and remove arch wires
    - F. Ligate an arch wire

**REQUIRED READING:**

Torres, H. and A. Ehrlich. Modern Dental Assisting. 7th edition. Philadelphia: W.B. Saunders, 2003

**SUGGESTED READING:**

Blade-Jacobs, B. and K. Borquez. California RDA Review. 3<sup>rd</sup> Ed. California: Jacobs Company, 1998.

**REQUIRED WRITING:**

This course is task-oriented; therefore, no formal writing assignment is required.

**OUTSIDE ASSIGNMENTS:**

**Students are expected to spend a minimum of three hours per unit per week in class and on outside assignments, prorated for short-term classes.**

Students are expected to complete their reading assignments, writing assignments, and study for exams.

**INSTRUCTIONAL METHODOLOGY:**

**Check all that apply:**

- lecture
- laboratory
- lecture-laboratory combination
- directed study

**DISTANCE LEARNING:**

**This course may be offered as a distance learning course and meets Title 5 regulations 55370, 55372, 55374, 55376, 55378, and 55380.**

Yes  No

**If yes, check all that apply:**

- Television Course (Video one-way, e.g. ITV, video cassette, etc.)
- Online Course (Text one-way, e.g. newspaper, correspondence, electronic file, etc.)
- Two-Way Video Conferencing (Two-way interactive video and audio)
- One-Way Video Conferencing (One-way interactive video and two-way interactive audio)
- Computer Assisted Instruction (A specialized form of mediated instruction relying primarily on student access to information and prepared lessons or teaching materials through a computer terminal, but not under immediate supervision of a qualified instructor.)

**GRADING POLICY AND STANDARDS** (include methods of determining whether the stated objectives have been met by students):

1. The student must pass laboratory evaluations at 75% competency or a substandard grade for the course will be assigned.
2. There are written three examinations. In addition to the unit examinations there is a comprehensive final examination.

Grading policy is in compliance with college standards described in the Palomar College catalog and the faculty manual.

- 100-90% = A
- 89-80% = B
- 79-70% = C
- 69-60% = D
- 59- 0% = F

Each student must complete the laboratory requirements with 75% proficiency PRIOR to taking the written and (clinical) practical finals

1. Lab evaluations = 40%
2. 3 examinations at = 30%
2. Written Final Exam = 30%

Evaluation of Student's Achievement:

- A. Written examinations
- B. Self and instructor laboratory evaluations
- C. Demonstrated competency of all projects
- D. Completion of projects on due dates
- F. Evaluation of all laboratory projects to include:
  1. Asepsis (during ALL procedures)
  2. Study cast impressions
  3. Pouring and trimming study casts
  4. Fabrication of
    - a. temporary crowns
    - b. temporary sedative dressings
    - c. temporary bridge
  5. Manipulation of miscellaneous impression materials
  6. Appropriate impression techniques
  7. Manipulation of dental lab materials
  8. Fabrication of custom acrylic trays
  9. Determining intra-oral measurements on stone/plaster models
  10. Placement and removal of orthodontic separators and archwires on typodont

**IS COURSE REPEATABLE FOR REASON(S) OTHER THAN DEFICIENT GRADE?**

Yes \_\_\_\_ No X Number of times course may be taken for credit: 1

If yes, identify specific provision of Title 5 Division 2 section(s), 55761-55763 and 58161 which qualifies course as repeatable:

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**SIGNATURES ON FILE:**