

# Syllabus for DA 154, Dental Assisting Materials and Duties

## Course Information

<b>Semester &amp; Year:</b> Fall 2021
<b>Course ID &amp; Section #:</b> DA 154 E1709 and DA 154 E1710
<b>Prerequisites/ Co-requisites:</b> Acceptance in the Dental Assisting Program Cohort
<b>Number of units:</b> 3
<b>Lecture hours:</b> 36
<b>Lab hours:</b> 54
<b>Instructor's name:</b> Hillary Reed, RDAEF, CDA (Lecture/ Lab)
<b>Day/Time:</b> Tuesday Lab (E1709): 8:30-11:40 Tuesday Lecture (E1709/E1710): 12:00-2:05 Tuesday Lab (E1710): 2:10-5:20
<b>Location:</b> AT 112 (Lab)/ AT 115 (Lecture)

## Instructor Contact Information

<b>Office location:</b> AT 101
<b>Office hours:</b> Thursdays, Fridays and by appointment
<b>Phone number:</b> 707-476-4250
<b>Program Coordinator phone number:</b> 707-476-4253
<b>Program Coordinator email address:</b> <a href="mailto:Hillary-reed@redwoods.edu">Hillary-reed@redwoods.edu</a>
<b>Absences:</b> In the event of emergency contact 476-4250. To be eligible for alternative exams the absence must be reported ½ hour prior to the beginning of class. Excessive absences will result in Program dismissal.

## Required Materials

<b>Textbook Title:</b> Modern Dental Assisting, 13 <sup>th</sup> Edition with Workbook (ISBN: 978-0-323-62485-5)
<b>Author:</b> Bird and Robinson
<b>Textbook Title:</b> Dental Instruments, 7 <sup>th</sup> Edition (ISBN: 978-0-323-67243-6)
<b>Author:</b> Bartolomucci-Boyd
<b>Other requirements:</b> Dental Assisting Program Handbook, Uniform, Personal Protective Equipment, Darby Dental Kit

## Course Description

A basic introduction to materials as applicable to dental assisting. Implementation of safety measures and technique development are emphasized in utilizing common products in clinical dentistry. Customary duties are practiced in preparation for clinical competency in patient care. Note: Acceptance into the Program is required prior to enrollment. Applications are accepted February – August. Uniform required.

## Course Objective

1. Apply didactic content and demonstrate pre-clinical competence (laboratory) prior to practical application of dental assisting duties in patient care.

## Course Student Learning Outcomes

1. Demonstrate proper set-up according to given protocol for a variety of general dentistry procedures.
2. Function as a chairside dental assistant performing essential duties as allowed by the California Dental Practice Act common to general dentistry to the pre-clinical competence level as prescribed by the dentist
3. Exhibit safety, managing infection and hazard protocol consistent with guidelines and mandates provided.

## Pre-requisites and Co-requisites

The Dental Assisting Program is approved by the Dental Board of California (DBC) and Commission on Dental Accreditation as a cohort of classes to fulfill the hour requirements of a minimum of 900 instructional hours at the post-secondary level that includes 300 clinical practice hours. Additionally, didactic, laboratory, pre-clinical, and clinical content must be covered.

The Dental Assisting Program of Study requires the student to successfully complete the requirements of DA 150 prior to enrolling in the fall semester cohort of courses DA 153, DA 154, DA 155, DA 156, and DA 156C. Students are enrolled in these courses concurrently. Curriculum reiterates and combines concepts, information, and proficiencies from other courses to prepare students for the clinical setting.

## Course Content

1. Occupational Health and Infection Prevention in Dentistry.
2. Preventative Dentistry.
3. Restorative Dentistry.
4. Impressions.
5. Fixed Prosthetics and Cements.
6. Laboratory Materials and Procedures.

## Specific Didactic Course Skill Sets (Objectives)

1. Apply learned theory to patient care.
2. Demonstrate ability to follow directions and given protocol.

### Occupational Health and Infection Prevention in Dentistry:

3. Describe the role of the Environmental Protection Act (EPA), Food and Drug Administration (FDA), and Occupational Safety and Health Administration (OSHA) in dentistry.
4. List the components of the OSHA Hazard Communication Standards including the Safety Data Sheets (SDS), universal symbols, and record keeping requirements.
5. Manage infection and hazard control protocol consistent with published professional guidelines and safety regulations.

### Preventative Dentistry:

6. Discuss preventative dentistry and describe the components and guidelines of a preventative dentistry program.
7. Identify American Dental Association Caries Risk Assessments and collect patient data.

### Restorative Dentistry:

8. Demonstrate knowledge of properties and competence in the use and manipulation of restorative materials.
9. Discuss the factors related to selection of restorative dental materials, including tooth structure, sensitivity, and adherence.
10. Discuss the restorative steps when assisting with different classes of restorations.
11. Describe the types of matrices used for anterior and posterior restorations.

### Impressions:

12. Discuss the types of impression material and proper technique for use in general dentistry procedures.

**Fixed Prosthodontics and Cements:**

13. Describe indirect restorations, including inlays, onlays, veneers, full crowns, and fixed bridges.
14. List the steps in indirect preparation procedure and cementation procedure.

**Laboratory Materials and Procedures:**

15. Demonstrate knowledge of properties and competence in the use and manipulation of restorative materials, dental cements, impression materials, gypsum, acrylics, thermoplastics, and waxes.

**Specific Pre-Clinical Course Lab Skill Sets (Objectives)****Occupational Health and Infection Prevention in Dentistry:**

1. Create an appropriate label for a secondary container.
2. Operate an ultra-sonic cleaner.
3. Sterilize instruments and hand-pieces using an autoclave.
4. Perform biologic monitoring.

**Preventative and Restorative Dentistry:**

5. Identify dental equipment, instruments, materials, and supplies.
6. Prepare operatory and set up for various general dentistry procedures.
7. Provide pre- and post- operative instructions prescribed by a dentist.
8. Apply disclosing agent and aid in proper brushing and flossing techniques.
9. Give basic oral hygiene instruction.
10. Apply fluoride and desensitizing agents.
11. Apply bases, liners, and bonding agents.
12. Place and remove matrix retainers, matrix bands, and wedges.

**Impressions:**

13. Take preliminary impressions and occlusal registration.

**Fixed Prosthodontics and Cements:**

14. Assist with removal of cement and/or bonding agent.
15. Place, fabricate, and remove direct and indirect provisional restorations.

**Laboratory Materials and Procedures:**

14. Pour and fabricate study models and/or casts.

## Skill Demonstrations

Prior to performing dental assisting functions/duties in the clinical setting, students must demonstrate laboratory/pre-clinical competency to a 75% or better to comply with CODA and DBC requirements for the following:

1. Manage infection and hazed control protocol consistent with guidelines and requirements
2. Prepare set-ups for a variety of general dentistry procedures.
3. Provide pre-and post-operative instructions prescribed by the dentist.
4. Provide preventative patient education and oral hygiene instruction.
5. Apply fluoride agents.
6. Assist and assemble matrices.
7. Apply liners, bases, and bonding agents.
8. Perform preliminary impressions and pour study models.
9. Fabricate and remove provisional restorations.

## Handbook

All students have signed acknowledgement that they have accessed the Dental Assisting Handbook in Canvas, as well as read and agreed to detailed information provided regarding information, notifications, requirements, policies, rules and disciplinary actions. The Handbook further discusses Student Support Services, Grading Policies, Disruptive Behavior, and Emergency Procedures.

## Canvas Information

College of the Redwoods Canvas System is used by students and the instructors for grade tracking, referencing handouts (files), and discussion participation. Students can access Canvas at any time, using their college e-mail and password to determine their current grade in the course as well as specific scores for completed participation, assignments, or exams/ quizzes. Instructors enter grades weekly.

Students can access Canvas by going to [CR Home \(redwoods.edu\)](https://redwoods.edu) and then right clicking on Canvas icon on the top of the page. Once in Canvas go to courses to set your Dashboard.

Log into Canvas at <https://redwoods.instructure.com>

Password is your 6 digit birth date

For tech help, email [its@redwoods.edu](mailto:its@redwoods.edu) or call 707-476-4160

Students have the ability to have an alternate first name and pronouns to appear in Canvas. Contact [Admissions & Records](#) to request a change to your preferred first name and pronoun. Your Preferred Name will only be listed in Canvas. It does not change your legal name in our records. See the [Student Information Update form](#).

## Accessibility

College of the Redwoods is committed to making reasonable accommodations for qualified students with disabilities. If you have a disability or believe you might benefit from disability-related services and accommodations, please contact your instructor or [Disability Services and Programs for Students](#) (DSPS). Students may make requests for alternative media by contacting DSPS based on their campus location:

**Eureka: 707-476-4280, student services building, 1<sup>st</sup> floor**

If you are taking online classes DSPS will email approved accommodations for distance education classes to your instructor. In the case of Face-to-face instruction, please present your written accommodation request to your instructor at least one week before the needed accommodation so that necessary arrangements can be made. Last minute arrangements or post-test adjustments usually cannot be accommodated.

## Lecture and Lab Preparation

Students are to have read assigned chapters prior to arriving to lecture and lab. The lecture and lab activities are designed to assist the students in comprehending the content and preparing for the clinical setting.

Each week the student will participate in activities designed to reinforce the information discussed in lecture. A "Preclinical Competency Tracking Sheet" is used to determine participation and preparedness. Step-by-step procedures in the textbook include illustrations, the equipment and supplies needed, icons, and the rationale behind certain steps. These step-by-step procedures are used to practice in the lab setting to prepare for RDA Skills Competency Tests required prior to performing the function in the clinical setting. The step-by-step procedures are provided in the MDA 13<sup>th</sup> Edition Workbook.

### **Lecture Examinations**

All lecture examinations will be administered in the beginning of class. The exam will consist of multiple choice, true/false, fill in the blank, short answer, and identification questions. Please refer to your course syllabus for exam times, dates, and chapters covered.

### **Practical Examinations**

Practical examinations provide assessment for participation in the clinical setting. Students must earn a minimum of 75% on all RDA Skills Competency Tests and Instrument Identifications/Tray Set-up Exams to participate in the clinical setting. Students are allowed two attempts. The grade earned on the first attempt will be the grade recorded in Canvas. Students scoring below a 75% will require remediation, allowing for the second attempt. Remediation allows the student to score a 75% or above on the second attempt, allowing for participation in the clinical setting.

After remediation, if the student continues to score 74% or below on the second attempt the student will not be able to participate in the clinical setting due to unpreparedness and safety concerns in patient care. Likewise students requiring more than 2 remediation contracts throughout the semester will not be able to participate in the clinical setting and will be dropped from the course.

### **Work Readiness Points**

To be successful in the workforce, students have to develop skill sets and healthy work habits necessary for lasting employment.

Students are awarded five Pay Day Points for full participation in the activities and tasks assigned to each class session (lab and lecture), where all requirements, policies, and rules are followed as stated in the Program Handbook. Students begin the course with zero Pay Day Points. Pay Day points will be factored into the course grade.

Students not participating in activities or tasks or not following requirements, policies, and rules or who are absent will not acquire any Pay Day Points for that class session(s). This includes those that are tardy or leave early. Additionally disciplinary action (as outlined in the Program Handbook) for the second, third, and fourth offense will affect the final course grade negatively.

### **Special Note**

The course instructor(s) and/or the Program Coordinator have the right to at any time for any reason alter any content of the course syllabus. Course content alterations can only be done by faculty at their discretion.

## Dental Assisting Program Grading Scale

The Commission on Dental Accreditation and the Dental Board of California require the lecture and lab grade to be 75% or better. The Dental Assisting Program courses are sequential and have co-requisites. Students not passing with a 75% or better in the course cannot continue.

Grade	Percentage	Definition
A	96-100	Outstanding progress
A-	90-95	Outstanding progress
B+	87-89	Above average progress
B	84-86	Above average progress
B-	81-83	Average Progress
C+	78-80	Satisfactory Progress
C	75-77	Lowest acceptable Progress
D	65-74	No progression,
F	<65	Failure
W	N/A	Official Withdrawal

## Course Requirements

### Overall Course Grade Calculation:

The overall course grade is weighted and determined by an average. Students cumulative scores on quizzes (15%), written exams (35%), practical (lab) exams (35%), assignments (10%), and participation (5%) are averaged together to generate a percentage determining the overall course grade.

Participation Portion: Weighted 5% of total grade:	Weighted 5% of total grade:
Pay Day - Work Readiness Points 5 points per lecture and 5 points per lab	
Assignment Portion:	Weighted 10% of total grade
RDA Skills Worksheet (100 points)	
Quiz Portion:	Weighted 15% of total grade
5 Quizzes (40 points each)	
Written Exam Portion:	Weighted 35% of total grade
3 Written Exams (150 points each)	
1 Written Final Exam (500 points)	
Practical (Lab) Exam Portion,:	Weighted 35% of total grade
4 RDA Skills Competency Tests (100 points each)	
4 Procedure Operatory Set-up Exams (75 points each)	
1 Practical (Lab) Exam (425 points)	

## Course Schedule of Activities and Assignments

### Week 1

**Unit: Occupational Health and Infection Prevention in Dentistry**

#### **Tuesday, August 24 (Lecture)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 22 Regulatory and Advisory Agencies
- Chapter 23 Chemical and Waste Management
- Chapter 19 Disease Transmission and Infection Prevention

#### **Tuesday, August 24 (Lab)**

*Textbook Procedure Competencies:* 19.1, 19.2, 19.3, 19.4, 19.5, 23.1

### Week 2

**Unit: Occupational Health and Infection Prevention in Dentistry**

#### **Tuesday, August 31 (Lecture)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 23 Chemical and Waste Management
- Chapter 21 Principles and Techniques of Instrument Processing
- Chapter 20 Principles and Techniques of Disinfection
- Chapter 24 Dental Unit Waterlines

#### **Tuesday, August 31 (Lab)**

*Textbook Procedure Competencies:* 20.1, 20.2, 21.1, 21.2, 21.5, 21.6, 21.7, 21.8, 23.1, 24.1

### Week 3

**Unit: Occupational Health and Infection Prevention in Dentistry**

#### **Tuesday, September 7 (Lecture)**

#### **QUIZ #1 (CH. 20-24)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 21 Principles and Techniques of Instrument Processing
- Chapter 20 Principles and Techniques of Disinfection
- Chapter 24 Dental Unit Waterlines

#### **Tuesday, September 7 (Lab)**

*Textbook Procedure Competencies:* 20.1, 20.2, 21.1, 21.2, 21.5, 21.6, 21.7, 21.8, 23.1, 24.1

## **Week 4**

**Unit: Occupational Health and Infection Prevention in Dentistry**

### **Tuesday, September 14 (Lecture)**

#### **EXAM #1 (CH. 20-24)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 21 Principles and Techniques of Instrument Processing
- Chapter 20 Principles and Techniques of Disinfection
- Chapter 24 Dental Unit Waterlines

### **Tuesday, September 14 (Lab)**

#### **RDA SKILLS COMPETENCY TEST #1**

**(Instrument Processing with Ultra-sonic Cleaner and Sterilization with Autoclave)**

*Textbook Procedure Competencies:* 20.1, 20.2, 21.1, 21.2, 21.5, 21.6, 21.7, 21.8, 23.1, 24.1

## **Week 5**

**Unit: Preventative Dentistry**

### **Tuesday, September 21 (Lecture)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 13 Dental Caries
- Chapter 14 Periodontal Disease
- Chapter 15 Preventative Dentistry

### **Tuesday, September 21 (Lab)**

*Textbook Procedure Competencies:* 13.1, 13.2, 15.1, 15.2, 15.3, demonstrate disclosing, display oral hygiene instructions and proper technique to peer

## **Week 6**

**Unit: Preventative Dentistry**

### **Tuesday, September 28 (Lecture)**

#### **QUIZ #2 (CH. 13, 14, 15)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 13 Dental Caries
- Chapter 14 Periodontal Disease
- Chapter 15 Preventative Dentistry

### **Tuesday, September 28 (Lab)**

#### **NEW PATIENT EXAM and PROPHYLAXIS PROCEDURE SET-UP EXAM**

*Textbook Procedure Competencies:* 13.1, 13.2, 15.1, 15.2, 15.3, demonstrate disclosing, display oral hygiene instructions and proper technique to peer



## **Week 7**

***Unit: Restorative Dentistry***

### **Tuesday, October 5 (Lecture)**

#### **QUIZ #3 (CH. 43, 44, 48)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 43 Restorative and Esthetic Material
- Chapter 44 Dental Liners, Bases, and Bonding Systems
- Chapter 48 General Dentistry
- Chapter 49 Matrix Systems for Restorative Dentistry

### **Tuesday, October 5 (Lab)**

*Textbook Procedure Competencies:* 43.1, 43.2, 43.3, 48.1, 48.2, 48.3, 48.4, 48.5, 49.1, 49.2, 49.3

RDA Skills Sheet Criteria

## **Week 8**

***Unit: Restorative Dentistry***

### **Tuesday, October 12 (Lecture)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 43 Restorative and Esthetic Material
- Chapter 44 Dental Liners, Bases, and Bonding Systems
- Chapter 48 General Dentistry
- Chapter 49 Matrix Systems for Restorative Dentistry

### **Tuesday, October 12 (Lab)**

*Textbook Procedure Competencies:* 43.1, 43.2, 43.3, 48.1, 48.2, 48.3, 48.4, 48.5, 49.1, 49.2, 49.3

RDA Skills Sheet Criteria

## **Week 9**

***Unit: Restorative Dentistry***

### **Tuesday, October 19 (Lecture)**

#### **EXAM #2 (CH. 13, 14, 15, 43, 44, 48, 49)**

### **Tuesday, October 19 (Lab)**

**AMALAGAM and COMPOSITE PROCEDURE SET-UP EXAMS**

**RDA SKILLS COMPETENCY TEST #2**

**(Matrix Systems, Liners, Bases, and Sedative Dressings)**

## **Week 10**

***Unit: Impressions***

### **Tuesday, October 26 (Lecture)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 46 Impression Materials
- Chapter 47 Study Models Laboratory Materials and Procedures (pages 729-731 & 736-740)

### **Tuesday, October 26 (Lab)**

*Textbook Procedure Competencies:* 19.6, 46.1, 46.2, 46.3, 46.4, 47.2, 47.3, 47.4

## **Week 11**

***Unit: Impressions and Fixed Prosthodontics/ Cements***

**Tuesday, November 2 (Lecture)**

**QUIZ #4 (CH. 46)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 46 Impression Materials
- Chapter 50 Fixed Prosthodontics
- Chapter 51 Provisional Coverage

**Tuesday, November 2 (Lab)**

*Textbook Procedure Competencies: 46.3, 46.4, 46.5, 46.6, 46.7, 46.8, 50.2, 51.1, RDA Skills Sheet Criteria*

**Week 12**

***Unit: Fixed Prosthodontics and Cements***

**Tuesday, November 9 (Lecture)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 50 Fixed Prosthodontics
- Chapter 51 Provisional Coverage
- Chapter 45 Dental Cements

**Tuesday, November 9 (Lab)**

**RDA SKILLS COMPETENCY TEST #3**

**(Preliminary Alginate Impressions Maxillary and Mandibular w/ Bite Registration)**

*Textbook Procedure Competencies: 50.2, 51.1, 51.2, 51.3, 45.3, 45.7 RDA Skills Sheet Criteria*

**Week 13**

***Unit: Fixed Prosthodontics and Cements***

**Tuesday, November 16 (Lecture)**

**EXAM #3 (CH. 46, 50, 51, 47 – Study Models)**

*Textbook reading assignment in preparation for lecture class:*

- Chapter 45 Dental Cements

**Tuesday, November 16 (Lab)**

**CROWN and BRIDGE PREP PROCEDURE SET-UP EXAM**

*Textbook Procedure Competencies: 45.1, 45.2, 45.3, 45.4, 45.5, 45.6, 45.7, 50.3, RDA Skills Sheet Criteria*

**Week 14**

**Monday, November 22 – Friday, November 26**

**Thanksgiving Holiday Week**

**Week 15**

*Unit: Laboratory Materials and Procedures*

**Tuesday, November 30 (Lecture)****QUIZ #5 (CH. 45)**

*Textbook reading assignment in preparation for lecture class:*

Chapter 47 Laboratory and Materials Procedures

**Tuesday, November 30 (Lab)****RDA SKILLS COMPETENCY TEST #4****(Temporary Fabrication, Cementation, and Excess Cement Removal)**

*Textbook Procedure Competencies: 45.1, 45.2, 45.3, 45.4, 45.5, 45.6, 45.7, 50.3, RDA Skills Sheet Criteria*

**Week 16**

*Unit: Laboratory Materials and Procedures*

**Tuesday, December 7 (Lecture)**

*Textbook reading assignment in preparation for lecture class:*

Chapter 47 Laboratory and Materials Procedures

**Tuesday, December 7 (Lab)****FINAL PRACTICAL EXAM – CUMULATIVE****RDA SKILLS SHEET DUE****Week 17****Tuesday, December 14 (Lecture)****FINAL WRITTEN EXAM –ALL INFECTION CONTROL CONTENT**

**(Cumulative Information from DA 153, DA 154, DA 156)**