

Syllabus for DA 154, Dental Assisting Materials and Duties

Course Information

Semester & Year: Fall 2025
Course ID & Section #: DA 154 E9660 and DA 154 E9669
Instructor's Name: Hillary Reed, RDAEF, CDA, COA, CDPMA, CPFDA (Lecture/ Lab)
Day/Time: Tuesday Lab (E5728): 8:30-11:40 Tuesday Lecture (E5728/E5729): 12:00-2:05 Tuesday Lab (E5729): 2:10-5:20
Location: AT 112 (Lab)/ AT 115 (Lecture)
Number of Lecture Proctored Exams: 4
Number of Laboratory Proctored Exams: 7
Course Units: 3
Lecture Hours: 36
Lab Hours: 54
Prerequisites: DA 150, Dental Assisting Program Orientation
Co-requisites: DA 153, DA 155, DA 156, DA 156C

Instructor Contact Information

Office Location: AT 101
Office Hours: Thursdays, Fridays and by appointment
Phone Number: 707-476-4250
Program Coordinator Phone Number: 707-476-4253
Program Coordinator Email Address: Hillary-reed@redwoods.edu
Absences: 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

Textbook Title: Modern Dental Assisting, 14 th Edition with Workbook (ISBN: 978-032-382-4408)
Author: Robinson
Textbook Title: Dental Instruments, 8 th Edition (ISBN: 978-032-387-3901)
Author: Bartolomucci-Boyd
Other requirements: 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.
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Course Objective

1. Apply didactic content and pre-clinical competence level to essential dental assisting duties in general dentistry procedures in patient care.
2. Exhibit quality control by following directions, safety measures, and sound judgement.

Course Student Learning Outcomes

1. Demonstrate proper set-up according to verbal and written directives as well as 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 utilizing sound judgement, evaluating for quality control and analyzing proficiency.

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

Fixed Prosthodontics and Cements:

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

Laboratory Materials and Procedures:

17. Create a custom tray.

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.

Educational Accessibility and Support

College of the Redwoods is committed to providing reasonable accommodation for qualified students who could benefit from additional educational support and services. You may qualify if you have a physical, mental, sensory, or intellectual condition which causes you to struggle academically, including but not limited to:

- Mental health conditions such as depression, anxiety, PTSD, or bipolar disorder
- Common ailments such as arthritis, asthma, diabetes, autoimmune disorders, and diseases
- Temporary impairments such as a broken bone, recovery from significant surgery, or a pregnancy-related disability
- A learning disability (i.e. dyslexia, reading comprehension)
- Neurodevelopmental disorders such as a learning disability, intellectual disability, autism, acquired brain injury, or ADHD
- Vision, hearing, or mobility conditions

Available services include extended test time, quiet testing environments, academic assistance and tutoring through the [LIGHT Center](#), counseling and advising, alternate formats of course materials (e.g., audio books, braille, E-texts), assistive technology, learning disability assessments, approval for personal attendants, interpreters, priority registration, on-campus transportation, adaptive physical education and living skills courses, and more. If you believe you might benefit from disability- or health-related services and accommodations, please contact [Student Accessibility Support Services \(SASS\)](#). If you are unsure whether you qualify, please contact Student Accessibility Support Services (SASS) for a consultation: sass@redwoods.edu.

Eureka campus Location: Student Services Building, first floor

Phone: 707-476-4280

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.

Accessing Canvas

1. Log into Canvas at [My CR Portal](#)
2. For help logging in to Canvas and general tech help, visit [Canvas Support Home](#)
3. Once you're logged in to Canvas, you click on the Help icon on the left menu

Special Note

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

Lecture and Lab Preparation

Students are to have read assigned chapters prior to arriving to lecture and lab. The lecture and lab activities 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 14th Edition Workbook.

Didactic (Lecture) Examinations

All lecture examinations are given 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.

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
Sterilizer Group Project	
RDA Skills Worksheet (100 points)	
Quiz Portion:	Weighted 15% of total grade
5 Quizzes (40 points each)	
Didactic Exam Portion:	Weighted 35% of total grade
3 Didactic Exams (150 points each)	
1 Didactic Final Exam (300 points)	
Practical (Lab) Exam Portion,:	Weighted 35% of total grade
4 RDA Skills Competency Tests (100 points each)	
3 Procedure Operatory Set-up Exams (75 points each)	
1 Practical (Lab) Exam (150 points)	

Course Schedule of Activities and Assignments

Week 1

Unit: Occupational Health and Infection Prevention in Dentistry

Tuesday, August 26 (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 26 (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, September 2 (Lecture)

Textbook reading assignment in preparation for lecture class:

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

Tuesday, September 2 (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 9 (Lecture)

QUIZ #1 (CH. 20-24)

Textbook reading assignment in preparation for lecture class:

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

Tuesday, September 9 (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

Due: Sterilizer Group Project

Unit: Occupational Health and Infection Prevention in Dentistry

Tuesday, September 16 (Lecture)

EXAM #1 (CH. 20-24)

Textbook reading assignment in preparation for lecture class:

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

Tuesday, September 16 (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 23 (Lecture)

Textbook reading assignment in preparation for lecture class:

Chapter 13 Impact of Oral Public Health (Fluoride-Plaque Control Program pgs. 151-167)

Chapter 15 Dental Caries

Chapter 16 Periodontal Disease

Tuesday, September 23 (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 30 (Lecture)

QUIZ #2 (CH. 13, 15, 16)

Textbook reading assignment in preparation for lecture class:

Chapter 13 Impact of Oral Public Health (Fluoride-Plaque Control Program pgs. 151-167)

Chapter 15 Dental Caries

Chapter 16 Periodontal Disease

Tuesday, September 30 (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 7

Unit: Restorative Dentistry

Tuesday, October 7 (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 7 (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 14 (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 14 (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 21 (Lecture)

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

Tuesday, October 21 (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 28 (Lecture)

Textbook reading assignment in preparation for lecture class:

Chapter 46 Impression Materials and Techniques

Chapter 47 Laboratory Materials and Procedures (Study Models pages 716-718; 722, 725-728)

Tuesday, October 28 (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 4 (Lecture)

Textbook reading assignment in preparation for lecture class:

Chapter 46 Impression Materials and Techniques

Chapter 50 Fixed Prosthodontics

Chapter 51 Provisional Coverage

Tuesday, November 4 (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

Tuesday, November 19 (Lecture and Lab)

Veteran's Day Holiday

Week 13

Unit: Fixed Prosthodontics and Cements

Tuesday, November 18 (Lecture)

QUIZ #4 (CH. 46)

Textbook reading assignment in preparation for lecture class:

Chapter 50 Fixed Prosthodontics

Chapter 51 Provisional Coverage

Chapter 45 Dental Cements

Tuesday, November 18 (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 12

Tuesday, November 19 (Lecture and Lab)

Veteran's Day Holiday

Week 14

Monday, November 25 – Friday, November 29

Thanksgiving Holiday Week

Week 15

Unit: Laboratory Materials and Procedures

Tuesday, December 3 (Lecture)

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

Textbook reading assignment in preparation for lecture class:

Chapter 47 Laboratory and Materials Procedures

Tuesday, December 3 (Lab)

CROWN and BRIDGE PREP PROCEDURE SET-UP EXAM

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 10 (Lecture)

QUIZ #5 (CH. 45)

Textbook reading assignment in preparation for lecture class:

Chapter 47 Laboratory and Materials Procedures

Tuesday, December 10 (Lab)

RDA SKILLS SHEET DUE

Textbook Procedure Competencies: 47.1, 47.7

Week 17

Tuesday, December 17 (Lecture)

FINAL WRITTEN EXAM –ALL INFECTION CONTROL CONTENT

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