



Syllabus for DA 163, Advanced Dental Assisting Science

Course Information

Semester & Year: Spring 2026
Course ID & Section #: DA 163 (E0099)
Instructor's Name: Hillary Reed, RDAEF, CDA, COA, CDPMA, CPDA
Day/Time: Thursday Lecture (E8329) 8:30-10:35
Location: AT 115 (Lecture)
Course Units: 2
Lecture Hours: 36
Number of Proctored Didactic Exams: 3
Prerequisites: Acceptance in Dental Assisting Program cohort, successful completion of fall semester courses with a 75% or better in DA 150, DA 153, DA 154, DA 155, DA 156, DA 156C.
Co-requisites: DA 163, DA 164, DA 165, DA 166, DA 167

Instructor Contact Information

Office Location: AT 101
Office Hours: Tuesdays, Thursdays, and Fridays by appointment
Office Phone Number: 707-476-4250
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.
Communication Note: Communications with the instructor in-person or electronically that need a response occur during customary business hours during the business week.
Instructor Email Address: RHillary-Reed@redwoods.edu
Program Coordinator Phone Number: 707-476-4253
Program Coordinator Email Address: Hillary-reed@redwoods.edu

Required Materials

Textbook Title: Modern Dental Assisting, 14 th Edition (ISBN: 978-032-382-4408)
Author: Bird and 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 continuation of introductory biomedical science as applicable to dental assisting. Preventative patient education is emphasized. Oral pathology, nutrition, and pharmacology are examined. Customary terms and proper vocabulary are practiced in preparation for clinical competency in patient care.

Course Objective

1. Apply didactic content (scientific based) to the practical application of dental assisting in patient care.

Course Student Learning Outcomes

1. Present treatment plans and informative patient education as recommended by the American Dental Association.

2. Communicate proper terminology when identifying basic pathology in the oral cavity linked to poor nutrition, oral habits, disorders, conditions, and developmental trauma.
3. Identify common drugs prescribed in dentistry for pre-medication, infection, and sedation for pre-operative patient care.

Pre-requisites and Co-requisites

The Dental Assisting Program of Study requires the cohort of students to have successfully completed DA 153, DA 154, DA 155, and DA 156 with a 75% or better to be eligible to enroll in the spring semester cohort of courses.

Additionally, the Dental Assisting Program of Study requires the cohort of students to enroll in DA 163, DA 164, DA 165, and DA 167 concurrently. This is a Dental Board of California (DBC) and Commission on Dental Accreditation (CODA) requirement. The curriculum reiterates and combines concepts, information, and proficiencies from other courses to prepare students for the clinical setting.

Course Content Topics

1. Preventative Dentistry, Oral Diagnosis and Treatment Planning
2. Oral Health, Nutrition, and Special Populations
3. Pathology and Pharmacology

Specific Didactic Course Skill Sets (Objectives)

Preventative Dentistry, Oral Diagnosis and Treatment Planning:

1. Describe the aspects, methods, and advantages of preventative dentistry.
2. Provide patient preventative education and oral hygiene instruction.
3. Gather data for patient risk assessment for caries, utilizing CAMBRA guidelines and ADA form.
4. Gather data for patient needs for fluoride supplements and/or varnish utilizing ADA guidelines and form.
5. Discuss the importance of a treatment plan differentiating between levels of care.
6. List ways a treatment plan can be presented to a patient identifying relevant information.

Oral Health, Nutrition, and Special Populations:

7. Identify the importance of diet and nutrition in the formation, development, and maintenance of the oral cavity.
8. Describe how the patient's oral health can affect their overall health.
9. Discuss the link between nutrition and dentistry, including vitamin deficiencies.
10. List oral manifestations that occur due to vitamin deficiencies.
11. Assess patient health histories for dental alerts and medically compromised patients.
12. Categorize patients into how treatment is anticipated to proceed and what changes are necessary.

Pathology and Pharmacology:

13. Differentiate oral pathology lesions and/or conditions associated with eating disorders, poor nutrition, medications, drug abuse, oral habits, trauma, infections, sexually transmitted, developmental disorders, chronic inflammation, and systemic disease.
14. Demonstrate accurate use of a drug reference when determining the medications listed on a health/ dental history form or when prescribed by the dentist.
15. Define DEA and explain the Controlled Substance Act, identifying requirements, agencies, and regulations.
16. Identify how commonly used drugs in dentistry are administered as well as their properties, actions, side effects, indications and contraindications.
17. Identify common medications, drugs, and agents used in dentistry to treat common oral entities, pre-medicate for both sedative and prophylactic purposes, as well as used to treat dental-related infection.

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 Preparation

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

Didactic (Lecture) Examinations

All lecture examinations are administered at 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.

Work Readiness Points

To be successful in the workforce, students must 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 are a 5% portion of the course grade.

Students who do not participate in activities or tasks or do not follow 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.

Course Requirements/ Evaluation and Grading Policy

Overall Course Grade Calculation:

The overall course grade is determined by an average. Students cumulative scores on quizzes, written exams, assignments, and participation are averaged together to generate a percentage, determining the overall course grade.

Participation Portion:	Weighted 5% of total grade
Pay Day - Work Readiness Points 5 points per lecture	
Assignment Portion:	Weighted 10% of total grade
Pharmacology Project (50 points)	
Quiz Portion:	Weighted 35% of total grade
3 Quizzes (40 points each)	
Lecture Exam Portion	Weighted 50% of total grade
2 Lecture Exams (150 points each)	
1 Lecture Final Exam (350 points)	

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 Schedule of Activities and Assignments

Week 1 - Thursday, January 22 (Lecture)

Unit: Preventative Dentistry, Oral Diagnosis and Treatment Planning:

Textbook reading assignment in preparation for lecture class:

Chapter 15 – Dental Caries

Chapter 28 – Oral Diagnosis and Treatment Planning

Week 2 - Thursday, January 29 (Lecture)

Unit: Preventative Dentistry, Oral Diagnosis and Treatment Planning:

Textbook reading assignment in preparation for lecture class:

Chapter 15 – Dental Caries

Chapter 28 – Oral Diagnosis and Treatment Planning

Week 3 - Thursday, February 5 (Lecture)

QUIZ #1 (Chapters 15 and 28)

Unit: Preventative Dentistry, Oral Diagnosis and Treatment Planning:

Textbook reading assignment in preparation for lecture class:

Chapter 15 – Preventative Dentistry

Chapter 28 – Oral Diagnosis and Treatment Planning

Week 4 - Thursday, February 12 (Lecture)

Unit: Preventative Dentistry, Oral Diagnosis and Treatment Planning:

Textbook reading assignment in preparation for lecture class:

Chapter 13 – Impact of Oral Public Health

Chapter 28 – Oral Diagnosis and Treatment Planning

Week 5 - Thursday, February 19 (Lecture)

Unit: Preventative Dentistry, Oral Diagnosis and Treatment Planning:

Textbook reading assignment in preparation for lecture class:

Chapter 13 – Impact of Oral Public Health

Chapter 16 – Periodontal Diseases

Chapter 28 – Oral Diagnosis and Treatment Planning

Week 6 - Thursday, February 26 (Lecture)

QUIZ #2 (Chapters 13 and 28)

Unit: Preventative Dentistry, Oral Diagnosis and Treatment Planning:

Textbook reading assignment in preparation for lecture class:

Chapter 16 – Periodontal Diseases

Chapter 28 – Oral Diagnosis and Treatment Planning

Week 7 - Thursday, March 5 (Lecture)

EXAM #1 (Chapters 13, 14, 15, 16, 28)

Unit: Preventative Dentistry, Oral Diagnosis and Treatment Planning:

Textbook reading assignment in preparation for lecture class:

Chapter 16 – Periodontal Diseases

Chapter 28 – Oral Diagnosis and Treatment Planning

Week 8 - Thursday, March 12 (Lecture)

UNIT: Oral Health, Nutrition, and Special Populations

Textbook reading assignment in preparation for lecture class:

Chapter 29 – The Special needs and Medically Compromised Patient

Chapter 14 – Nutrition

Week 9 – Monday, March 16 – Friday, March 20**SPRING BREAK****Week 10 - Thursday, March 26 (Lecture)****UNIT: Pathology and Pharmacology**

Textbook reading assignment in preparation for lecture class:

Chapter 29 – The Special needs and Medically Compromised Patient

Chapter 14 – Nutrition (Vitamin Deficiencies and the Oral Cavity)

Chapter 17 – Oral Pathology

Week 11 - Thursday, April 2 (Lecture)**UNIT: Pathology and Pharmacology**

Textbook reading assignment in preparation for lecture class:

Chapter 17 – Oral Pathology (Common Pathologies)

Chapter 30 – Principles of Pharmacology

Week 12 - Thursday, April 9 (Lecture)**QUIZ #3 (Chapters 16, 17, 29)****UNIT: Pathology and Pharmacology**

Textbook reading assignment in preparation for lecture class:

Chapter 17 – Oral Pathology (Sexually Transmitted Infections)

Chapter 30 – Principles of Pharmacology

Week 13 - Thursday, April 16 (Lecture)**UNIT: Pathology and Pharmacology**

Textbook reading assignment in preparation for lecture class:

Chapter 17 – Oral Pathology

Chapter 30 – Principles of Pharmacology

Week 13 - Thursday, April 23 (Lecture)**EXAM #2 (Chapters 16, 17, 29, 30)****UNIT: Pathology and Pharmacology**

Textbook reading assignment in preparation for lecture class:

Chapter 30 – Principles of Pharmacology

Apprehensive and Fearful Patient Strategies

Week 15 - Thursday, April 30 (Lecture)**PHARMACOLGY PROJECT DUE****UNIT: Pathology and Pharmacology**

Textbook reading assignment in preparation for lecture class:

Cumulative Review

Week16 - Thursday, May 7 (Lecture)**FINAL EXAM (CUMULATIVE)**

Week 17 - Thursday, May 14 (Lecture)

**CLEAN OUT DRAWER AND LOCKER
TIME CAPSULE/ CLASS PICTURE
PINNING CERAMONY**