

DE 51 Course Outline as of Fall 2025**CATALOG INFORMATION**

Dept and Nbr: DE 51 Title: OCCUP HEALTH AND SAFETY

Full Title: Occupational Health and Safety

Last Reviewed: 8/26/2024

Units	Course Hours per Week		Nbr of Weeks		Course Hours Total	
Maximum	2.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	2.00	Lab Scheduled	0	8	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	2.00		Contact Total	35.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 105.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

Catalog Description:

In this course, the students will learn the science and principles of current infection control protocol, dental office safety and accident prevention. The focus is on the Centers for Disease Control (CDC) Guidelines for Infection Control in Dentistry and the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard.

Prerequisites/Corequisites:

Concurrent Enrollment in DE 55A

Recommended Preparation:**Limits on Enrollment:**

Acceptance to the Allied Dental Programs

Schedule of Classes Information:

Description: In this course, students will learn the science and principles of current infection control protocol, dental office safety and accident prevention. The focus is on the Centers for Disease Control (CDC) Guidelines for Infection Control in Dentistry and the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard. (Grade Only)

Prerequisites/Corequisites: Concurrent Enrollment in DE 55A

Recommended:

Limits on Enrollment: Acceptance to the Allied Dental Programs

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:

IGETC:	Transfer Area	Effective:	Inactive:
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CSU Transfer:	Transferable	Effective:	Fall 1997	Inactive:
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UC Transfer:		Effective:		Inactive:
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CID:

Certificate/Major Applicable:

Both Certificate and Major Applicable

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

1. Apply evidence-based infection control and safety policies in the dental practice.
2. Evaluate and assume responsibility for a safety program that includes management of hazardous waste, chemical waste, biomedical waste, and compliance with regulatory agencies.

Objectives:

At the conclusion of this course, the student should be able to:

1. Explain the Occupational Safety & Health (OSHA) guidelines and the Center for Disease Control (CDC) recommendations for management of blood borne pathogens.
2. Describe the appropriate infection control measures associated with dentistry.
3. Analyze the various methods of disinfection and sterilization.
4. Compare and contrast various types of personal protective equipment.
5. Describe the methods of handling both regulated and non-regulated dental waste.
6. Explain the hazards associated with dental unit waterlines and the protocols of waterline maintenance.
7. Develop a written chemical management plan, that includes methods of labeling and Safety Data Sheets (SDSs).

Topics and Scope:

- I. Overview of Roles & Responsibilities of Agencies
 - A. Occupational Safety & Health Administration (OSHA)
 - B. Centers for Disease Control & Prevention (CDCP)
 - C. Environmental Protection Agency (EPA)
 - D. Office Safety & Asepsis Procedures Research (OSAP)
 - E. Dental Board of California (DBC)
 - F. Recommendations and regulations

- II. Infection Control in Dentistry
 - A. Steps in disease development
 - B. Chain of infection
 - C. Spread of microbes
- III. Microorganisms, Bloodborne Pathogens and Infectious Diseases
 - A. Microorganisms
 - B. Methods of transmission
 - C. Bloodborne pathogens
 - D. Immunization
- IV. Personal Protection in Dentistry
 - A. Employer responsibilities
 - B. Personal protective equipment
 - C. Hand Hygiene
- V. Surface and Equipment Asepsis
 - A. Standard Operating Procedures (SOP)
 - B. Aseptic technique
- VI. Instrument Recirculation
 - A. Disinfection vs. Sterilization
 - B. Instrument reprocessing
 - C. Sterilization monitoring
- VII. OSHA Exposure Control Plan
 - A. Requirements
 - B. Written program
 - C. Chemical inventory
 - D. Employee training
 - E. Safety data sheets (SDS)
 - F. Hazard prevention
 - G. Sharps management
- VIII. Waste Management
 - A. Types of waste
 - B. Regulations for handling/labeling/disposal
- IX. Dental Unit Water Asepsis
 - A. Dental unit water
 - B. Biofilm formation/presence of microorganisms
 - C. Dental unit water and infection control
 - D. Approaches to improve dental unit water
 - E. Water quality monitoring

Assignment:

1. Reading assignments, not graded (10- 30 pages per week)
2. Readiness Assessment Evaluations (4-7)
3. Group project(s)
4. Quizzes (4-6)
5. Midterm
6. Final

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Group project(s)

Writing
20 - 30%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Readiness assessment evaluations

Problem solving
20 - 30%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations
0 - 0%

Exams: All forms of formal testing, other than skill performance exams.

Quizzes, midterm and final

Exams
45 - 50%

Other: Includes any assessment tools that do not logically fit into the above categories.

None

Other Category
0 - 0%

Representative Textbooks and Materials:

Infection Control and Management of Hazardous Materials for the Dental Team. 7th ed. Miller, Chris. Elsevier. 2023.

Instructor prepared materials