College of San Mateo
Official Course Outline

1. **COURSE ID:** DENT 730 **TITLE:** Occupational Safety and Infection Control in Dentistry
   Units: 1.5 units **Hours/Semester:** 24.0-27.0 Lecture hours; and 48.0-54.0 Homework hours
   Method of Grading: Letter Grade Only
   Prerequisite: Admission to the Dental Assisting Program

2. **COURSE DESIGNATION:**
   Degree Credit
   Transfer credit: none

3. **COURSE DESCRIPTIONS:**
   Catalog Description:
   Topics covered include infection control procedures, safety policies, compliance issues for dental practice, as well as guidelines and standards from regulatory agencies such as the Centers for Disease Control and the Occupational Safety and Health Administration.

4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**
   Upon successful completion of this course, a student will meet the following outcomes:
   1. Apply infection control and safety policies in the dental practice.
   2. Describe the CDC guidelines for management of blood borne pathogens, hazard waste and biomedical waste.
   3. Follow the proper protocol for exposure control.

5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**
   Upon successful completion of this course, a student will be able to:
   1. Describe and explain the method and procedures for maintaining proper sterile and aseptic conditions in the dental office.
   2. Select and describe appropriate methods for cleaning, disinfecting and sterilizing the various instruments and equipment.
   3. Describe the compliance requirements for hazard communication management.
   4. Describe the components of the California Dental Board's Infection control regulations.

6. **COURSE CONTENT:**
   Lecture Content:
   Topics and Scope
   A. Agencies:
      1. Centers for Disease Control (CDC).
      2. California Dental Board (CDB).
      3. Occupational Safety and Health Administration (OSHA).
      4. Environmental Protection Agency (EPA).
   B. Written Programs and Protocols:
      1. Personnel health program.
      2. Exposure management plan.
      3. Chemical management plan.
      4. Waste management plan.
   C. Principles of Infection Control:
      1. Diseases.
      2. Types of pathogens.
      3. Modes of transmission.
      4. Chain of infection.
   D. Hand Hygiene:
      1. Issues.
      2. Hand hygiene in practice.
      3. Choosing hand hygiene products.
      4. Hand washing techniques.
   E. Personal Protective Equipment (PPE):
      1. Types of PPE.

2. Preventing exposure with PPE.
3. Choosing appropriate PPE.

F. Contact Dermatitis and Latex Allergies:
1. Types of dermatitis.
2. Latex hypersensitivity.
3. Reducing exposure to latex:
a. Education
b. Patient screening
c. Managing latex-allergic patients

G. Precleaning:
1. Methods.
2. Comparison of methods.

H. Heat Sterilization:
1. Classification of instruments, devices, and equipment.
2. Instrument processing area.
3. Types, advantages and disadvantages:
a. Steam autoclaves
b. Dry heat sterilizer
c. Unsaturated chemical vapor

I. Monitoring:
1. Biological
2. Process indicators.
3. Process integrators.

J. Surface Disinfection:
1. Categories of surfaces.
2. Levels of disinfectants.
3. Evaluating disinfectants.

K. Dental Unit Waterlines:
1. The issues.
2. Water quality devices.
3. Monitoring dental unit water.

L. Dental Radiography:
1. The issues.
2. Preparation and exposure.
3. Processing.
a. manual
b. automatic

M. OSHA Hazard Communication Standard:
1. Components.
2. Evaluation of program.

N. General Office Safety:
1. Disaster Plan.
2. Evacuation.
3. Communication.
4. Office safety inspection.

Lab Content:

A. Demonstrating proper Hand Hygiene:
1. Issues.
2. Hand hygiene in practice.
3. Choosing hand hygiene products.
4. Hand washing techniques.

B. Donniong and Doffing Personal Protective Equipment (PPE):
1. Types of PPE.
2. Preventing exposure with PPE.
3. Choosing appropriate PPE.

F. Contact Dermatitis and Latex Allergies:
1. Types of dermatitis.
2. Latex hypersensitivity.
3. Reducing exposure to latex:

a. Education
b. Patient screening
c. Managing latex-allergic patients

C. Demonstrating use of Precleaning:
1. Methods.
2. Comparison of methods.

D. Utilizing Heat Sterilization:
1. Classification of instruments, devices, and equipment.
2. Instrument processing area.
3. Types, advantages and disadvantages:
a. Steam autoclaves
b. Dry heat sterilizer
c. Unsaturated chemical vapor

E. Applying Monitoring systems:
1. Biological
2. Process indicators.
3. Process integrators.

F. Demonstrationg Surface Disinfection:
1. Categories of surfaces.
2. Levels of disinfectants.
3. Evaluating disinfectants.

G. Maintaining Dental Unit Waterlines:
1. The issues.
2. Water quality devices.
3. Monitoring dental unit water.

H. Identifying OSHA Hazard Communication Standard:
1. Components.
2. Evaluation of program.

I. Maintain and update General Office Safety:
1. Disaster Plan.
2. Evacuation.
3. Communication.
4. Office safety inspection.

7. **REPRESENTATIVE METHODS OF INSTRUCTION:**
Typical methods of instruction may include:
A. Lecture
B. Discussion

8. **REPRESENTATIVE ASSIGNMENTS**
Representative assignments in this course may include, but are not limited to the following:
Writing Assignments:
Written exposure management plan, written chemical management plan, written waste management plan, written maintenance log

Reading Assignments:
Assigned reading 10-20 pages per class

9. **REPRESENTATIVE METHODS OF EVALUATION**
Representative methods of evaluation may include:
A. Class Participation
B. Exams/Tests
C. Homework
D. Oral Presentation
E. Quizzes
F. Written examination

10. **REPRESENTATIVE TEXT(S):**

Possible manuals include:

A. OSAP. Policy to Practice: OSAP's guide to the CDC guidelines-2019 updates, OSAP, 01-01-2019

Origination Date: November 2021
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Course Originator: Beth LaRochelle