



Western Technical College

## 10508101 Dental Health Safety

### Course Outcome Summary

#### Course Information

<b>Description</b>	Prepares dental auxiliary students to respond proactively to dental emergencies, control infection, prevent disease, adhere to OSHA Standards, and safely manage hazardous materials. Students also take patient vital signs and collect patient medical/dental histories. This course is a WTCS aligned course required in both the Dental Hygienist and Dental Assisting programs.
<b>Career Cluster</b>	Health Science
<b>Instructional Level</b>	Technical Diploma Courses
<b>Total Credits</b>	1
<b>Total Hours</b>	36

#### Textbooks

*OSHA & CDC Guidelines: OSAP Interact Training System*. 7th Edition. Copyright 2022. Publisher: Organization for Safety Asepsis and Prevention. **ISBN-13:** 978-0-9752519-5-9. Required.

#### Learner Supplies

Safety Glasses. **Vendor:** Campus Shop. Required.

Lab Coat. **Vendor:** To be discussed in class. Required.

Utility Gloves. **Vendor:** To be discussed in class. Required.

Red Western Program Patch - \$3.50. **Vendor:** To be discussed in class. Required.

Uniform: Black lab jacket, black pants, tennis shoes. **Vendor:** To be discussed in class. Required.

## Success Abilities

1. Cultivate Passion: Increase Self-Awareness
2. Live Responsibly: Develop Resilience
3. Live Responsibly: Foster Accountability
4. Refine Professionalism: Act Ethically
5. Refine Professionalism: Improve Critical Thinking
6. Refine Professionalism: Participate Collaboratively
7. Refine Professionalism: Practice Effective Communication

## Program Outcomes

1. DA-1 year: Manage infection and hazard control
2. DA-1 year: Demonstrate professional behaviors, ethics, and appearance

## Course Competencies

### 1. Analyze infections that may influence the practice of dentistry

#### Assessment Strategies

- 1.1. in the completion of a classification worksheet in which you analyze infections that may influence the practice of dentistry
- 1.2. by answering questions that require you to apply knowledge about this competency (Your instructor may require several written exams as a part of this course. You will be notified in advance.)

#### Criteria

- 1.1. classification includes microbes commonly found in dentistry
- 1.2. classification identifies significant characteristics of bacteria, viruses and fungi
- 1.3. classification identifies diseases and treatment common and relevant to dentistry according to the microbes that cause them
- 1.4. classification includes comparison of mode of transmission, symptoms and treatment for all types of hepatitis
- 1.5. classification includes mode of transmission, symptoms and treatment for HIV positive patients and AIDS patients
- 1.6. classification includes mode of transmission, symptoms and treatment for herpes
- 1.7. classification includes mode of transmission, symptoms and treatment for tuberculosis
- 1.8. classification is organized and formatted using graphics or headers
- 1.9. classification evidences correct grammar, punctuation, and spelling

#### Learning Objectives

- 1.a. Describe the diseases of major concern to the dental assistant and explain why they cause concern
- 1.b. Identify characteristics pertaining to the microorganism bacterium
- 1.c. Identify characteristics pertaining to the microorganism viruses
- 1.d. Identify characteristics pertaining to the microorganism fungi
- 1.e. Describe how microorganisms cause disease, the types of infections and the stages of infectious diseases.
- 1.f. Describe the function of the immune system
- 1.g. Identify symptoms, mode of transmission, and treatment for all types of hepatitis
- 1.h. Identify symptoms, mode of transmission, and treatment for HIV positive patients and AIDS patients
- 1.i. Identify symptoms, mode of transmission, and treatment for herpes

- 1.j. Identify symptoms, mode of transmission, and treatment for tuberculosis

## **2. Employ personal and patient protection to prevent disease transmission**

### **Assessment Strategies**

- 2.1. by employing personal and patient protection in a skill demonstration
- 2.2. in the clinic using a role-play patient or mannequin

### **Criteria**

- 2.1. perform according to standard precautions as spelled out in the OSHA Bloodborne Pathogen standard
- 2.2. perform handwashing technique
- 2.3. wear protective eye wear, mask, gloves and gown
- 2.4. provide your patient with protection of glasses and drape

### **Learning Objectives**

- 2.a. Describe the components of OSHA's Bloodborne Pathogen Standard and the responsibilities of the dental team to implement them
- 2.b. Describe OSHA mandated universal precautions and examples of the required components
- 2.c. Identify recommended immunizations
- 2.d. List the steps in an effective handwashing technique
- 2.e. Compare and contrast the benefits and limitations of personal and patient protective barriers
- 2.f. Relate principles of infection control to protect the practice, the patient, and members of the dental team from cross-contamination

## **3. Reprocess treatment area**

### **Assessment Strategies**

- 3.1. in reprocessing the treatment room by completing a skill demonstration in the clinic

### **Criteria**

- 3.1. perform according to standard precautions as spelled out in the OSHA Bloodborne Pathogen standard
- 3.2. wear personal protective equipment
- 3.3. select the most effective disinfectant
- 3.4. follow manufacturer's product specifications
- 3.5. remove all barriers
- 3.6. remove all contaminated items from operatory and take to sterilization area
- 3.7. manage waste and sharps safely
- 3.8. clean and disinfect all treatment room equipment
- 3.9. prepare treatment room for the next patient
- 3.10. employ safety precautions
- 3.11. use infection control protocol

### **Learning Objectives**

- 3.a. Differentiate among the terms asepsis, disinfection and sterilization
- 3.b. Identify sources of cross contamination in the operatory setting
- 3.c. Identify methods of reducing contaminated aerosols in the operatory
- 3.d. Compare chemical disinfectants used for surface equipment disinfection
- 3.e. Identify situations when sterilization, disinfection or barrier techniques are appropriate
- 3.f. Explain how infectious waste, including contaminated sharps, is isolated in the practice setting
- 3.g. Sequence the steps of reprocessing a treatment room
- 3.h. Identify specific infection control considerations unique to the dental laboratory setting
- 3.i. Describe current ADA, CDC, and OSAP recommendations on dental office water line safety
- 3.j. Identify the personal protective equipment required
- 3.k. Determine safety procedures when reprocessing treatment area
- 3.l. Identify appropriate aseptic techniques when reprocessing treatment area

## **4. Reprocess instruments**

### **Assessment Strategies**

- 4.1. by reprocessing instruments by completing a skill demonstration
- 4.2. in the laboratory/clinic

### **Criteria**

- 4.1. perform according to standard precautions as spelled out in the OSHA Bloodborne Pathogen standard

- 4.2. wear personal protective equipment
- 4.3. differentiate instruments for method of post-treatment processing
- 4.4. transport instruments for processing
- 4.5. clean instruments
- 4.6. select the most effective disinfectant or sterilant
- 4.7. package instruments
- 4.8. sterilize/disinfect instruments
- 4.9. deliver and/or store sterile/disinfected instruments
- 4.10. perform chemical monitoring of the sterilizer
- 4.11. perform biological monitoring of the sterilizer
- 4.12. employ safety precautions
- 4.13. use infection control protocol

#### **Learning Objectives**

- 4.a. Compare chemical disinfectants/sterilants used for instrument processing
- 4.b. Differentiate among critical, semi-critical and non-critical items, with relation to instrument processing
- 4.c. Compare and contrast the methods of cleaning instruments
- 4.d. Explain the role of a holding solution in instrument reprocessing
- 4.e. Identify the steps in instrument reprocessing
- 4.f. Explain engineering controls and work practices used to prevent exposure when handling, transporting and packaging contaminated instruments
- 4.g. Explain the function and process of packaging instruments for reprocessing
- 4.h. Identify the methods utilized to sterilize instruments
- 4.i. Describe how to properly load the sterilizer
- 4.j. Compare and contrast methods of sterilization monitoring
- 4.k. Explain the role of biological monitoring in the prevention and transmission of infectious diseases
- 4.l. Identify the personal protective equipment required
- 4.m. Determine safety procedures when reprocessing instruments
- 4.n. Identify appropriate aseptic techniques when reprocessing instruments

### **5. Collect patients' medical/dental histories**

#### **Assessment Strategies**

- 5.1. in the completion of a medical history in a skill demonstration with a role-play patient
- 5.2. in the completion of a dental history in a skill demonstration with a role-play-patient

#### **Criteria**

- 5.1. greet and address the patient by name
- 5.2. explain the purpose of the medical/dental history and assure patient confidentiality
- 5.3. document all relevant information that the patient tells you
- 5.4. pronounce all terms correctly and are able to explain them to the patient in lay terms
- 5.5. communicate professionally with the patient
- 5.6. complete the medical/dental history within a timely manner
- 5.7. medical/dental history includes clarification of all noted medical conditions
- 5.8. medical/dental history is completely filled out and all questions have responses
- 5.9. medical/dental history red flags medical/dental alerts
- 5.10. medical/dental history is signed and dated
- 5.11. patient's records show accurate, up-to-date documentation of treatment and services

#### **Learning Objectives**

- 5.a. List and describe the essential elements of a medical/dental history form
- 5.b. List the purpose for completing a medical/ dental history before performing dental treatment
- 5.c. Outline the steps in completing a medical/dental history form
- 5.d. Identify items on the medical/dental history that would alert the dentist
- 5.e. Explain the importance of the concept of privileged communication and patient confidentiality
- 5.f. Relate how to interact with a patient while obtaining a medical/dental history
- 5.g. Relate strategies in dealing with a difficult patient
- 5.h. Describe the concern for latex allergy and methods to reduce latex exposure

### **6. Take patient's vital signs**

#### **Assessment Strategies**

- 6.1. by measuring and recording vital signs on role-play patient in a skill demonstration

- 6.2. by comparing your readings to those obtained by the instructor

#### **Criteria**

- 6.1. select the armamentarium
- 6.2. position yourself and patient correctly while taking vital signs
- 6.3. explain each of the vital signs to patient
- 6.4. take each of the vital signs
- 6.5. record each reading accurately on the patient record
- 6.6. verify your readings with those of your instructor
- 6.7. wear personal protective equipment
- 6.8. employ safety precautions
- 6.9. use infection control protocol

#### **Learning Objectives**

- 6.a. List the four vital signs
- 6.b. Describe the armamentarium required for taking vitals
- 6.c. Describe how to obtain and record the pulse of a patient
- 6.d. Describe how to obtain and record the respiration of a patient
- 6.e. Describe how to obtain and record the blood pressure of a patient
- 6.f. Describe how to obtain and record the temperature of a patient
- 6.g. Identify the personal protective equipment required
- 6.h. Determine safety procedures when taking patient vitals
- 6.i. Identify appropriate aseptic techniques when taking patient vitals

### **7. Handle dental office emergencies**

#### **Assessment Strategies**

- 7.1. by responding to a medical emergency scenario in the clinic/laboratory
- 7.2. by completing an incident report

#### **Criteria**

- 7.1. identify equipment and supplies used for dental office medical emergencies
- 7.2. appropriately care for equipment and supplies used for dental office medical emergencies
- 7.3. perform an oxygen tank maintenance check
- 7.4. confirm contents of the emergency kit are complete and current
- 7.5. determine the type and severity of medical emergency that is occurring
- 7.6. follow standard precautions as spelled out in the OSHA Bloodborne Pathogen standard
- 7.7. determine the appropriate response
- 7.8. wear personal protective equipment
- 7.9. employ safety precautions
- 7.10. use infection control protocol
- 7.11. complete an incident report that is accurate, complete, legible, and exhibits correct use of terminology and standard English

### **8. Handle dental office exposure emergencies**

#### **Assessment Strategies**

- 8.1. by responding to a chemical exposure scenario
- 8.2. by responding to a bloodborne and infectious disease exposure scenario
- 8.3. by completing an incident report

#### **Criteria**

- 8.1. refer to the SDS for the specific chemical
- 8.2. determine the type and severity of exposure that is occurring
- 8.3. follow standard precautions as spelled out in the OSHA Bloodborne Pathogen standard
- 8.4. determine the appropriate response
- 8.5. obtain medical attention, using appropriate level of urgency
- 8.6. follow appropriate post-exposure containment steps
- 8.7. wear personal protective equipment
- 8.8. employ safety precautions
- 8.9. use infection control protocol
- 8.10. complete an incident report that is accurate, complete, legible, and exhibits correct use of terminology and standard English

8.11. propose strategies for avoiding exposures of this nature