COMMON COURSE OUTLINE: Course discipline/number/title: DA 1225: Dental Infection Control

A. CATALOG DESCRIPTION

1. Credits: 2
2. Hours/Week: 1 hour lecture, 2 hours lab
3. Prerequisites (Course discipline/number): DA Program Admission
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

This course will prepare the dental assisting student to function aseptically and safely in the dental clinical environment. The course covers principles of microbiology and disease transmission, current concepts of infection control, and hazard communication and management in dental practice. Course content will review requirements and protocols as recommended by the American Dental Association, the Occupational Safety and Health Administration, and the Centers for Disease Control.

This course is a pre-requisite to all dental assisting clinical courses.

B. DATE LAST REVISED (Month, year): April, 2012

C. OUTLINE OF MAJOR CONTENT AREAS:

1. Microbiology and Disease Transmission
   a) Terms
   b) Classifications and Characteristics of Microbes
   c) Methods of Disease Transmission
   d) Sources of Disease Transmission in Dental Practice
   e) Body Defenses Against Disease
   f) Diseases of Major Concern in Dental Practice
   g) Preventing Disease Transmission

2. Infection Control
   a) Regulations and Recommendations
   b) Regulating and Informational Agencies
   c) Patient Assessment and Preparation
   d) Personal Protection for the Dental Team
   e) Recirculation Room Design
   f) Instrument Recirculation Protocol
   g) Sterilization Techniques and Sterilization Monitoring
   h) Disinfection Techniques and Disinfection Monitoring
   i) Surface Disinfection
   j) Specific Equipment Asepsis Protocol
   k) Clinic and Equipment Design with Infection Control in Mind
   l) Infection Control in Dental Radiology
   m) Infection Control in the Dental Laboratory

3. Hazard Communications and Management
   a) OSHA's Bloodborne and Hazard Materials Standard
   b) Types of Chemical Exposure
   c) Chemical Toxicity
   d) Reducing Hazards in the Dental Office
   e) Manufacturers Warning Labels
   f) Material Safety Data Sheets
   g) National Fire Protection Association's Hazardous Chemical Labeling
   h) Management of Hazardous Chemicals
   i) Specific Dental Occupational Environmental Hazards
   j) Management of Biofilms
   k) Office Emergency Procedures
   l) Marketing Dental Infection Control
D. **LEARNING OUTCOMES (GENERAL):** The student will be able to:

1. Demonstrate professional dental assistant techniques.
2. Define terms.
3. Describe microorganisms.
4. Identify and describe the six components in the chain of infection control.
5. Describe methods of disease transmission.
6. Identify sources of disease transmission in the dental environment.
7. Describe the body natural barriers and defenses to disease.
8. Define the terms associated with the human immune system.
9. Identify and describe the types of human immunity.
10. Identify the diseases of major concern to dental healthcare workers.
11. List the recommended methods to prevent disease transmission.
12. Identify each dental infection control regulating agency and explain the general recommendations each agency provides.
14. Describe the requirements of a dental office written exposure plan.
15. Describe an exposure determination in the dental office.
16. Describe the OSHA mandated training requirements for employees in the dental office.
17. Describe the requirements of the 2001 Needlestick Safety and Prevention Act.
18. Describe the requirements stated in the CDC 2003 MMRW Guidelines for Infection Control in the Dental Setting.
19. Describe the functions of the dental office safety supervisor.
20. List the basic principles of infection control for a dental office.
21. Explain the concept of universal precautions, standard precautions, and body isolation.
22. Describe the methods of personal protection against infection.
23. Identify the recommended immunizations for dental healthcare workers.
24. Describe the various personal protective equipment, the rationale for their use, and various designs and applications.
25. Describe potential hyper-sensitive reactions to latex and glove powders.
26. Describe and demonstrate the recommended hand washing techniques for the beginning/end of the day, between patients, and prior to surgery.
27. Describe the requirements and correct use of eye wash stations.
28. Describe the correct use of sharps containers and needle recapping devices.
29. Describe the correct management of an accidental exposure incident.
30. Describe the recommended recirculation room design.
31. List and describe the steps of instrument recirculation.
32. Describe the correct use of holding solutions.
33. Describe the correct use, operation, and testing of ultrasonic cleaners.
34. Describe instrument packaging methods.
35. Employ the rules of classifying instruments for sterilization and disinfection.
36. List and describe all the methods of sterilization.
37. Describe chemical and biological sterilization monitoring.
38. Correctly operate sterilization equipment.
39. List and describe all the methods of disinfection.
40. Correctly prepare chemical disinfectants for use.
41. Correctly disinfect instruments and supplies.
42. Describe correct disinfection monitoring.
43. Describe correct treatment room cleaning and disinfection.
44. Correctly clean and disinfect treatment rooms.
45. Describe correct instrument recirculation.
46. Describe correct aseptic techniques for special dental equipment.
47. Describe the recommended infection control protocol for special equipment and supplies.
48. Describe aseptic protocols for the dental lab.
49. Describe aseptic protocols for dental radiography.
50. Describe effective instrument/equipment/room design for aseptic techniques.
51. Describe the regulation of hazard communication and management.
52. Describe the OSHA Bloodborne and Hazard Communication Standard.
53. Describe and identify engineering and work practice controls.
D. LEARNING OUTCOMES (GENERAL): The student will be able to: Continued...
54. Employ hazard management protocols.
55. Identify types of exposure to hazardous chemicals.
56. Define acute and chronic chemicals toxicity.
57. Describe the contents of manufacturer’s warning labels.
58. Describe the purpose and content of MSDS sheets.
59. Describe the correct management and storage of MSDS.
60. Describe the requirements of the National Fire Protection Association’s chemical labeling system.
61. Correctly prepare hazardous chemical warning labels.
62. Describe the correct storage and transfer of hazardous chemicals.
63. Describe the required staff training for hazardous chemicals.
64. Describe specific hazards posed by occupational environmental hazards.
65. Describe effective medical waste management.
66. Implement effective medical waste management.
67. Describe dental unit waterline infection control procedures.
68. Describe the waterline biofilm and methods to control them.
69. Describe the requirements for water quality and “boil water” advisory procedures.
70. Describe dental office emergency protocols for general safety, fire and emergency evacuation, natural disasters, bomb threats, violence in the workplace, office signage, and first aid and emergency kits.
71. Describe methods of marketing dental infection control.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Written assignments
2. Weekly written quizzes.
3. Written Final Exam
4. Identification Final Exam
5. Attendance

G. RCTC CORE OUTCOME(S) ADDRESSED:
- Communication
- Critical Thinking
- Global Awareness/Diversity
- Civic Responsibility
- Personal/Professional Accountability
- Aesthetic Response

H. SPECIAL INFORMATION (if any):
1. RCTC Dental Assistant Program Uniforms and Name tag
2. RCTC Dental Assistant Program Safety Glasses
3. Immunizations up to date
4. Hepatitis B Vaccine
5. Satisfactory physical assessment
6. Acceptable state and national background studies
7. Students must comply with all RCTC Dental Assistant Program Dental Clinic/Lab Policies and Protocols. (includes Infection Control and Hazards Management Protocols and Clinic Dress and Etiquette Protocols)