

**HIBBING COMMUNITY COLLEGE
COURSE OUTLINE**

COURSE NUMBER & TITLE: DAS1528: Infection Control
CREDITS: 1 (1 Lec / 0 Lab)
PREREQUISITES: None

CATALOG DESCRIPTION:

Infection Control covers the major classifications of microorganisms, disease transmission, and infection control in the dental office. Compliance with current Occupational Safety and Health Agency (OSHA) and Center for Disease Control and Prevention (CDC) guidelines is discussed and practiced.

OUTLINE OF MAJOR CONTENT AREAS:

- I. Classification of microorganisms
 - A. Bacteria
 1. Examples of Diseases Caused by Bacteria
 - a. Tuberculosis
 - b. Legionellosis
 - c. Diphtheria, pertussis, and tetanus
 - d. Strep throat
 - e. Staphylococcal infections
 - f. Anthrax
 - g. Chlamydiae
 - B. Viruses
 1. Examples of Diseases Caused by Viruses
 - a. Measles, mumps, and rubella
 - b. Epstein-Barr
 - c. Mononucleosis
 - d. West Nile Virus
 - e. Poliomyelitis
 - f. Chickenpox
 - g. Common cold and influenza
 - C. Protozoa
 1. Examples of Diseases Caused by Protozoa
 - a. Amebic dysentery
 - b. Periodontal disease
 - c. Malaria
 - D. Fungi – Yeast & Molds
 1. Candidiasis
 2. Tinea
- II. Disease transmission

- A. Droplet
- B. Indirect
- C. Self-infection
- D. Operator infection
- E. Personal contact
- F. Carrier
- III. Identifying high-risk patients
 - A. Medical history
 - B. Universal Precautions/Standard Precautions
- IV. Infection Control Techniques in the Dental Office
 - A. Immunizations
 - B. Medical history
 - C. Handwashing
 - D. Alcohol-Based Hand Rubs
 - E. Lotions
 - F. Personal Protective Equipment
 - G. Barriers
 - H. Sterilization and disinfection of hand and rotary instruments
 - 1. Hand-scrub/ ultrasonic cleaning/thermal disinfectant
 - 2. Autoclaving
 - a. Autoclave wrap
 - b. Sterilization verification
 - c. Maintaining sterility
 - 3. Dry heat sterilization
 - 4. Chemical vapor sterilization
 - 5. Glass bead sterilization
- V. Disinfecting the operatory
- VI. Barriers
- VII. Laboratory asepsis
 - A. Impressions
 - B. Prostheses and equipment
- VIII. Hazardous materials in dentistry
 - A. Material Safety Data Sheets
 - B. Labeling
 - C. Training
 - D. Hazardous dental material inventory
- IX. Handling and disposals of sharps
- X. Sterilization monitoring
 - A. Biological Monitors
 - B. Process Indicators
 - C. Dosage Indicators
- IX. Techniques and Aids for Infection Control
 - A. Preprocedure Antiseptic Mouth Rinse
 - B. High-Volume Evacuation
 - C. Dental Dam Usage
 - D. Disposable Items

- XII. Clinical Asepsis Protocol
 - A. Treatment Area Protocol for Disinfecting and Cleaning
- XIII. Dental Unit Waterlines
- XIV. Dental Radiography Room and Equipment

COURSE GOALS/OBJECTIVES/OUTCOMES:

Students will

1. identify the disease process.
2. describe the methods of disease transmission.
3. identify high risk patients.
4. describe universal/standard precautions.
5. identify infection control techniques.
6. identify personal protective barriers.
7. explain sterilization and disinfection procedures.
8. demonstrate autoclave procedure.
9. identify the usage of different types of sterilizers.
10. describe the usage of several types of sterilization monitors.
11. explain disinfection techniques.
12. list various disinfectants and their applications as used in dentistry.
13. demonstrate disinfecting the operatory and impressions.
14. perform placing barriers in operatory.
15. identify the proper usage of preprocedure mouth rinses, high-volume evacuation, dental dams and disposable items.
16. identify the agencies regulating the dental profession.
17. explain the OSHA hazard program.
18. identify the forms required by OSHA and CDC.
19. demonstrate the correct protocol for disinfecting, cleaning, and sterilizing prior to seating the patient, as well as at the end of the dental treatment, in the dental radiography area, and in the dental laboratory.
20. explain the groups of microorganism.
21. identify the characteristics pertaining to bacteria.
22. list the characteristics of viruses.

MNTC GOALS AND COMPETENCIES MET:

N/A

HCC COMPETENCIES MET:

Working Productively & Cooperatively
Communicating Clearly & Effectively
Thinking Creatively & Critically
Social / Civic Responsibility

STUDENT CONTRIBUTIONS:

Attendance is crucial in this class. The student is expected to attend all lectures and working sessions, participate and implement input into class discussions, fill out appropriate CDC and OSHA forms in class, and hand in lab projects and assignments when due.

STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.

SPECIAL INFORMATION: (SPECIAL FEES, DIRECTIVES ON HAZARDOUS MATERIALS, ETC.)

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| AASC APPROVAL DATE: September 17, 2014 |
| REVIEW DATE: September 2019 |

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