DAKOTA COLLEGE AT BOTTINEAU

COURSE SYLLABUS

Course Prefix/Number/Title: DENT 117 Introduction to Infection Control, Immunology & Medical Emergencies in the Dental Practice

Number of Credits: 2 Credits

Course Description:
This course will introduce the student to the health and safety considerations for basic infection control and the disease process, including infectious diseases and disease transmission. Topics include occupational safety, personal protection, exposure control, infection control, sterilization and disinfection techniques, bloodborne pathogens standards and hazard and waste disposal as defined by governmental agencies such as OSHA, CDC, and EPA. This course will also study the prevention and treatment of common medical emergencies experienced in the dental office.

Hybrid Course Information:

- **What is a Hybrid Course?**
  DENT 117 Introduction to Infection Control, Immunology and Medical Emergencies is a hybrid course. A hybrid course replaces some in-class time with online learning activities completed outside of class. In-class meetings are used for collaboration and discussion.
- **Reduction of Face-to-Face Time:**
  For this course, DENT 117 classroom sessions for the second half of the semester are being replaced with these online activities: Online readings, PowerPoints, activities, and tests.
- **Expectations for Work Online:**
  Although we will meet in-person less frequently than in a regular course, this course requires the SAME amount of work. Taking a hybrid course demands a lot of discipline, self-direction, and time management skills. You may be expected to do work outside of class that may otherwise have been previously been conducted in-class.
- **Technical Requirements:**
  You will need regular access to a computer with reliable Internet access to complete assignments and tasks. If you have your own computer or are considering purchasing hardware, please refer to DCB's Recommended Computer Specifications.

Pre-requisite: Acceptance into the dental assisting or dental hygiene program

- DENT 116 Dental Anatomy

Course Objectives:

1. Describe the rationale and perform infection control procedures such as handwashing, placement and removal of personal protective equipment.
2. Demonstrate effective surface and equipment asepsis.
3. Describe the different types of dental office waste and discard hazardous waste using methods prescribed by OSHA.
4. Safely perform manual or ultrasonic cleaning of instruments.
5. Prepare instruments for sterilization using the wrap or bag technique.
6. Demonstrate operation of sterilizing, disinfecting and cleaning equipment.

7. Describe and perform dental unit water line maintenance.
8. Discuss the contents and legal implications of the OSHA Bloodborne Pathogens Standard.
9. Design and maintain a written hazard program.
10. Discuss common infectious disease, such as viral hepatitis, HIV and tuberculosis.
11. Identify disease of importance to dental practices for which there are vaccines, there are no vaccines and CDC list of vaccine-preventable disease for health care workers.
12. Take and record vital signs.
13. Describe and manage, through role play, common medical emergencies that occur in a dental practice.

Dental Assisting Student Learning Outcomes addressed in this course

1. **Competently execute dental assisting skills**: Utilize current guidelines for infection control, occupational safety, and perform four-handed chairside dental assisting duties and advanced functions as permitted by the North Dakota Board of Dentistry.

2. **Maintain dental and business office records**: Ensure compliance with HIPAA regulations while managing dental office records effectively.
3. **Apply legal and ethical standards**: Adhere to the North Dakota Dental Practice Act and exhibit professionalism in all interactions with patients, coworkers, and other healthcare professionals.
4. **Provide compassionate and culturally aware care**: Deliver dental assisting services with respect and sensitivity to cultural diversity.

Dental Assisting Program Goals:

1. Earn and maintain full accreditation status according to the Commission on Dental Accreditation (CODA).
2. Admit 100% (12/12) qualified dental assisting students annually according to Dakota College Bottineau's dental assisting program acceptance criteria.
3. Maintain an annual program completion rate of 92% (11/12).
4. Maintain an annual job placement rate of 92% (11/12).
5. Maintain employer satisfaction rate of 90% with readiness skills and content preparation of graduates.

Dental Hygiene Student Learning Outcomes addressed in this course

1. Provide patient centered, comprehensive, evidence-based dental hygiene care to a diverse socioeconomic, educational, and cultural patient population.
2. Apply the principles of professional and ethical standards in providing dental hygiene care to individuals of all populations.
3. Provide students with opportunities for interprofessioinal community health promotion.
4. Exhibit professionalism and communicate effectively with patients, coworkers, and other healthcare professionals.
5. Engage in professional activities and lifelong learning.

Dental Hygiene Program Outcomes

1. Prepare highly qualified dental hygiene professionals by providing up-to-date, high quality academic and clinical dental hygiene education.
2. Provide a competency-based education.
3. Provide students with opportunities for interprofessional community health promotion.
4. Earn and maintain full accreditation status according to the Commission on Dental Accreditation.
5. Incorporate emerging technologies to enhance quality dental hygiene care.
6. Prepare students to engage in professional activities and lifelong learning.

Instructor: Dr. Marvin Zerr DDS

Office: N/A

Office Hours: Available upon request

Phone: N/A

Email: marvin.zerr@dakotacollege.edu

Lab Instructor: Ms. Ricki Hill, CDA, RDA, RF

Office: Second Floor Faculty Offices

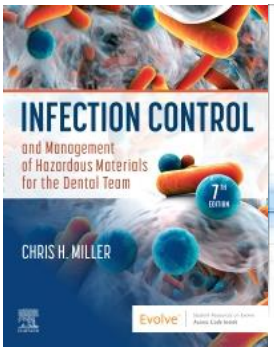
Office Hours: Tues 8am -12 pm, or upon appointment

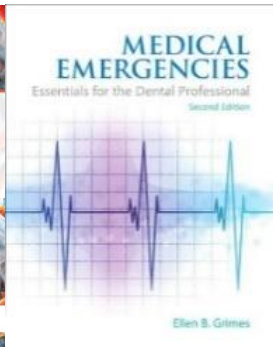
Phone: N/A

Email: Ricki.hill@dakotacollege.edu

Lecture/Lab Schedule: This course meets for 3 hours per week, one hour lecture, 2 hours lab, for one semester. Starting on Week 11 through the end of the semester, the lecture portion of this course will be online, the labs will meet in person. This course has 48 contact hours.

Textbooks Required:
Miller, C. (2023). *Infection Control and Management of Hazardous Materials for the Dental Team*. 7th Ed. Pearson. ISBN: 978-0-323-76496-4. Weeks 1 – 10:





Grimes, E. (2014). *Medical Emergencies Essentials for the Dental Provider*. 2nd Ed. Pearson. ISBN: 978-0-133-06562-6. Weeks 11 - 16

Course Requirements:
Dental program students must achieve a final grade of "C" or above to continue in the program.
The final grade for this course will be determined according to the following:

Professionalism	**Points Possible**
8 points per session (16 total sessions)	**128**

Graded Assignments	**Points Possible**
Ch. 11 Hand Hygiene	6
Ch. 12 Personal Protective Equipment Discussion	6
Ch. 14 Surface & Equipment Asepsis	6
Ch. 15 Case Scenario Breaches in Infection Control	6
Ch. 13 Instrument Processing/Sterilization Failure	6
Ch. 13 Instrument Processing/ Biological Monitoring	4
Ch. 6 Bloodborne Pathogens	6
Ch. 8 Infection Control Rationale and Regulations Online Discussion	6
Ch. 20 Asepsis Protocols/Disease Transmission scenario	6
Ch. 10 Immunization/ Scenario Vaccination	6
Ch. 18 Waste Management online discussion	6
Total points possible	**64**

Exams	**Points Possible**
Ch. 11 Hand Hygiene & Ch. 12 Personal Protective Equipment	40
Ch. 14 Surface & Equipment Asepsis & Ch. 15 Dental Unit Water Asepsis and Air Quality	40
Ch. 13 Instrument Processing	40
Ch. 6 Bloodborne Pathogens	30
Ch. 8 Infection Control Rationale and Regulations	20
Ch. 10 Immunizations & Ch. 20 Asepsis Protocols	25
Ch. 18 Waste Management	20
Ch. 1 – 4 and Ch. 15 in Medical Emergency Text	25
Ch. 5 Syncope & 9 CVA	15

Ch. 8 Seizure Disorder Ch. 13 Asthma	15
Ch. 10 Angina Pectoris and Acute MI & 12 Cardiac Pacemaker	15
Ch. 7 Hyperventilation & Ch. 15 Allergic Reactions	15
Total Points possible for exams	**300**

Skill Competencies	**Points Possible**
Applying Alcohol-based Hand rubs	18
Routine Hand Wash	21
Donning PPE	10
Removing PPE	30
Autoclaving Instruments	42
Following a Sterilization Failure	15
Operating the Ultrasonic Cleaner	21
Performing Biologic Monitoring	24
Sterilizing the Dental Handpiece	21
Barrier and Debarrier	30
Taking a Pulse	18
Taking Blood Pressure	54
Taking Respirations	18
Medical Emergency Role Play	18
First aid after an exposure	21
Total points possible	**361**

This course grade will be calculated by the percentages in the chart below:

Categories	**Percentage of final grade**	**Points Possible**	**Percentage calculated**
Professionlism	5%	128	6
Assignments	10%	64	6
Tests	35%	300	105
Skill Competencies	50%	361	181
	100%		**298**

The following grade scale will be used:

A	92 - 100	274 and up
B	84 – 91	250 - 273
C	75 – 83	223 - 249
D	67 – 74	200 - 222
F	Below 67	199 or less

Course Overview

Week	**Topics- Lecture & Lab**
Week 1 & 2	Ch. 11 Hand Hygiene; Ch. 12 PPE
Week 3 & 4	Ch. 14 Surface & Equipment Asepsis

	Ch. 15 Dental Unit and Air Quality
Week 5 & 6	Ch. 13 Instrument Processing
Week 7 & 8	Ch. 6 Bloodborne Pathogens Ch. 8 Infection Control Rationale and Regulations
Week 9	Ch. 20 Asepsis Protocols Ch. 10 Immunization
Week 10	Ch. 18 Waste Management
Week 11	Assisting in a Medical Emergency Taking Vital Signs Medical Emergency: Allergic Reactions
Week 12	Medical Emergency: Syncope and CVA
Week 13	Medical Emergency: Asthma and Seizures
Week 14	Medical Emergency: Cardiac Arrest and Angina; Cardiac Pacemaker
Week 15	Medical Emergency: Diabetic Emergency and Hyperventilation
Week 16 Final Exam	Final Exam on Medical Emergencies

General Education Competency/Learning Outcome(s) OR CTE Competency/Department Learning Outcome(s):
Employs industry-specific skills for workplace readiness.

Relationship to Campus Focus:
Dakota College Bottineau dental programs are designed to prepare students to meet the needs of communities by applying evidence-based decision making, using cutting-edge technology, and integrating quality and safety competencies into their dental programs. Each course within the program serves as a foundation for clinical practice in the dental assisting and dental hygiene professions. To meet the demands of the ever-changing field of dentistry, students are taught to value life-long learning.

Classroom Policies:

Attendance
Attendance is mandatory at all lectures, labs and clinic sessions. If you must be absent, (e.g., illness) please inform the instructor as soon as possible. It is the student's responsibility to meet with the faculty to find out what was missed. Labs and clinics may not be able to be made up. The instructor will assist you in finding an alternate assignment to learn the material missed.

Grading:
Course and lab/clinic grades are based on a variety of activities and assignments designated by the faculty. The criteria by which grades for each theory and clinical course are included in the course syllabus distributed to students. Students have access to and should review the learning management system grading calculation method.

Students are responsible to know what their grades are during the course. Please review the gradebook frequently. If an assignment or exam in the student's gradebook says the assignment or exam has not

been submitted or has not been entered, it is then treated as a fact the student didn't do the assignment or exam as outlined in the directions. Make sure your assignments are submitted before the due date to assure timely submission. Please see your Dakota Dental Program handbook for grading policies, in addition to the policies listed below.
Students must earn a minimum grade of "C" with a maintained 2.0 GPA or better in all required dental program courses. Students who fail a theory or lab/clinical course will be dismissed from the dental program. A final grade of "D" or "F" is considered to be a failed grade. If a student has unsatisfactory grades, he/she should contact the instructor as soon as possible to discuss remediation.

Assignments/Tests/Labs/Clinics: All assignments must be completed and submitted on time in the manner specified by the faculty. Students may fail the course if all assignments are not completed. If you have questions or need clarification, please reach out to the instructor of the course. The instructor's contact information is on page 1 of this syllabus.

Late/makeup work:
Late work will not be accepted (student will receive a zero) unless previously arranged with the instructor or impacted by extenuating circumstances. With faculty permission, a late assignment must be turned in within one week of the due date and that assignment will have a 5% deduction from the assignment grade. Extenuating circumstances will be evaluated by the faculty for the course.

Late tests:
If a student fails to take a test on time, he/she will need to contact the instructor to arrange a time to take the exam. There will be a 10% deduction from the test grade, for tests taken late. If a test isn't taken within a week of the test date, you will receive a zero for that test. Extenuating circumstances will be evaluated by the faculty for the course.

Student Email Policy:
Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Academic Integrity:
According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

Disabilities or Special Needs:
Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.

Title IX:
Dakota College at Bottineau (DCB) faculty are committed to helping create a safe learning environment for all students and for the College as a whole. Please be aware that all DCB employees (other than those designated as confidential resources such as advocates, counselors, clergy and healthcare

providers) are required to report information about such discrimination and harassment to the College Title IX Coordinator. This means that if a student tells a faculty member about a situation of sexual harassment or sexual violence, or other related misconduct, the faculty member must share that information with the College's Title IX Coordinator. Students wishing to speak to a confidential employee who does not have this reporting responsibility can find a list of resources on the DCB Title IX webpage.

Book for Weeks 1 – 9 Miller, C. Palenik, J. (2018). *Infection Control and Management of Hazardous Materials for the Dental Team*. 6th Ed. Pearson. ISBN: 978-0-323-400619.
Book for Weeks 10 – 16 Grimes, E. (2014). *Medical Emergencies Essentials for the Dental Provider*. 2nd Ed. Pearson. ISBN: 978-0-133-06562-6.

Topic Schedule Introduction to Infection Control, Immunology and Medical Emergencies

Week and Course Objectives (Found on page 1 of syllabus)	**Topics & Student Learning Outcomes** At the end of each unit the student will be able to:	**Student Assignments and Learning activities**	**Method of Evaluation for Competency**
Week 1 Course Objectives: 1	**Lecture: Instructor presentation and class activities** **Ch. 11 Hand Hygiene** Describe how the hands are a means of disease spread and differentiate between resident and transient skin flora	READ - Textbook (pp. 94 -95) ANSWER - textbook Review questions 1,3,4 (p. 99) CREATE Students create key infection control terms flashcards with terms on one side and the definitions on the other side.	
	Describe the types of products available for hand hygiene and their uses.	READ – Textbook (pp. 95-96) ANSWER – Textbook Review Questions 2, 5, 6, 9 (pp. 99-100) RESEARCH Have students research the various types of products available for hand hygiene and their uses. Students should bring their completed work to class for an activity.	
	Describe the procedures for hand hygiene and when hand hygiene should be performed.	READ – Textbook (pp. 96-97, 98) Figure 11.3 (p. 98) Procedure 11.1 (p. 97)	

		ANSWER – Textbook Review Questions 7, 8, 10 (pp. 99-100)	
	List properties to consider when selecting hand hygiene products and other hand hygiene considerations.	READ – Textbook (pp. 97, 99) Case Scenarios: Hand Hygiene & Protective Equipment (p. 99) REVIEW – Evolve Student Resources Practice Quizzes	**Case Scenarios Ch. 11** Hand Hygiene and Protective Equipment (in the textbook). After reading the scenario list: -What breaches in infection prevention occurred? -What are some potential consequences of these breaches?
Week 1 Course Objective: 1	**Lab:** • Practice recommended handwashing methods • Practice gloving and de-gloving techniques	Review Competency form for handwashing and gloving/de-gloving	
Week 2 Course Objective: 2	**Lecture**: Instructor presentation and class activities **Ch. 12 Personal Protective Equipment** Describe the protective value of gloves and list their uses, types, limitations, and harmful reactions that can occur from their use.	READ – Textbook (pp. 101-106) ANSWER – Textbook • Review Questions 1, 2, 6, 9-11 (pp. 111-112) CREATE Have students create key term flashcards with terms on one side and the definitions on the other side. RESEARCH Divide students into groups and have half of the groups research the various types of gloves available for use in dentistry and health care. The other half of the groups should research latex	

		allergies. Students should come to class prepared to present their findings. Pictures of the various types of gloves should be included in the presentations.	
	Describe the value of masks, protective eyewear, and protective clothing, and list their uses, types and limitations.	READ – Textbook (pp. 106-109) ANSWER – Textbook Review Questions 3, 4, 12 (pp. 111-112)	
	List the sequence of donning and removing personal protective barriers and the properties of protective equipment.	READ – Textbook (pp. 109-112) Case Scenarios: Eye Exposure (p. 111) Case Scenarios: Protective Eyewear (p. 111) ANSWER – Textbook Review Questions 5, 7, 8 (pp. 111-112) REVIEW – Evolve Student Resources Practice Quizzes	**Graded Assignment Case Scenario Ch. 12 Personal Protective Equipment** After reading the scenario in the text list: • What breaches in infection prevention occurred? • What are some potential consequences of these breaches? Upload to BB LMS.
Week 2 Course Objective: 1	**Lab:** Class Activities • Practice placing and removing PPE • Practice Handwashing methods	Study for online exam on Ch. 11 & 12 Study for competencies on PPE and Handwashing methods	
Online Test Ch. 11 & 12			**Online Test Ch. 11 & 12**

Week 3 Course Objectives: 2	**Lecture**: Instructor presentation and class activities **Ch. 14 Surface & Equipment Asepsis** Differentiate between clinical contact surfaces and housekeeping surfaces and determine which operatory surfaces may be involved in the patient-to-patient spread of microbes.	READ – Textbook (p. 142) ANSWER – Textbook Review Questions 1, 2 (p. 153) CREATE Students will create key term flashcards with terms on one side and the definitions on the other side.	
	List the operatory surfaces that should be covered with barriers before patient care and describe how to place and remove surface covers properly.	READ – Textbook (pp. 142-144) Procedure 14.1 (p. 144) ANSWER – Textbook Review Questions 5, 8 (p. 153)	
	Describe the importance of precleaning before surface disinfection and describe how to preclean and disinfect contaminated surfaces and equipment.	READ – Textbook (pp. 144-147) Procedure 14.2 (p. 145) ANSWER – Textbook Review Question 9 (p. 153)	
	Do the following regarding the characteristics of disinfectants: • List the types of surface disinfectants and describe their properties. • Differentiate between low-, intermediate- and high-level disinfectants and give examples when each should be used.	READ – Textbook (pp. 147-150) ANSWER – Textbook Review Questions 3, 4, 6, 7 (p. 153)	
	List general considerations for dental equipment	READ – Textbook (pp. 151-152)	

	decontamination and management of high-tech equipment in the dental office.	ANSWER – Textbook Review Question 10 (p. 153)	
	Describe how to retrieve and distribute clinical supply items aseptically.	READ – Textbook (pp. 152-153) Case Scenarios: Surface Asepsis (p. 153) REVIEW – Evolve Student Resources Practice Quizzes	**Case Scenario Ch. 14** After reading the scenario in your text on surface asepsis list: • What breaches in infection prevention occurred? • What are some potential consequences of these breaches?
Week 3 Course Objective: 1, 2	**Lab:** Class Activities- • Demonstrate the placement and removal of surface barriers in the operatory • Demonstrate effective disinfecting techniques on equipment • Competencies PPE and Handwashing		**Competencies on PPE and Handwashing**
Week 4 Course Objective: 7	**Lecture**: Instructor presentation and class activities, case scenarios **Ch. 15 Dental Unit Water Asepsis and Air Quality Objectives** Discuss the presence of microorganisms in dental unit water and list the types and importance of these microbes.	READ – Textbook (pp. 155 157) ANSWER – Textbook Review Questions 1-3, 9 (pp. 163-164) CREATE Have students create key term flashcards with terms on one side and the definitions on the other side.	

	Define biofilm and describe how it forms inside dental unit water lines.	READ – Textbook (pp. 157-159) ANSWER – Textbook Review Questions 4, 5 (pp. 163-164) RESEARCH Divide students into four groups and assign each group two factors that influence the formation of dental unit water line biofilm. Groups should research their factors and prepare a brief presentation of their findings.	
	Describe the concerns of having microbes present in dental unit water, the current infection control recommendations and different approaches for reducing the microbial quantity in dental unit water.	READ – Textbook (pp. 159-162) Procedure 15.1 (p. 162) ANSWER – Textbook Review Questions 6, 7, 10 (p. 164)	
	Describe the procedures for monitoring the quality of dental unit water, what a "boil-water" notice means, backflow prevention measures, and contamination of dental air concerns.	READ – Textbook (pp. 162-163) Case Scenarios: Water and Gloving (p. 163) ANSWER – Textbook Review Question 8 (p. 164) Complete Graded Assignment on Surface Disinfection Ch. Pretest on BB. Submit answers to BB. REVIEW – Evolve Student Resources Practice Quizzes	**Graded Assignment Case Scenario: Water and Gloving Ch. 15** After reading the scenario list: • What breaches in infection prevention occurred? • What are some potential consequences of these breaches? Upload to BB LMS.

Week 4 Objectives: 1, 2, 7	**Lab:** Class Activities- • Practice dental unit waterline asepsis • Practice Barrier/De-Barrier operatory • Practice Operatory Disinfection	Study for competencies on Dental Unit Water Asepsis Barrier/De-Barrier Operatory Disinfection	
Online Test Ch. 14 & 15			**Online Test Ch. 14 & 15**
Week 5 Course Objectives: 4, 5, 6	**Lecture**: Instructor presentation and class activities **Ch. 13 Instrument Processing** Differentiate between sterilization and disinfection; differentiate between critical, semi-critical, and noncritical patient care items and describe differences in how such items are processed; and define sterility assurance.	READ – Textbook (pp. 113-115) ANSWER – Textbook Review Questions 17, 19, 20 (p. 140) CREATE Have students create key term flashcards with terms on one side and the definitions on the other side.	
	Do the following regarding instrument processing procedures: • List the steps involved in instrument processing and describe the rationale for each step. • Describe the three methods for instrument cleaning and the techniques for performing this task safely.	READ – Textbook (pp. 115-116) Procedure 13.1 (p. 116) ANSWER – Textbook Review Questions 1, 2, 9, 10 (pp. 139-140) Complete the graded discussion assignment on BB on Sterilization Failure process.	**Graded Assignment Discussion Post Biological Monitoring Assignment** After reading the case scenario on page 144 in the text, Biological Monitoring, answer: -List potential opportunities for disease transmission in this scenario.

	• Determine which packaging materials are used for which methods of sterilization.		-State what should be done when a sterilization failure is noted. Post to BB.	
	Describe the physical conditions, advantages, and precautions related to steam, dry heat, and unsaturated chemical vapor sterilization.	READ – Textbook (pp. 116-121) ANSWER – Textbook Review Questions 4, 5, 11-13 (p. 140)		
	Compare the three methods of sterilization monitoring, describe how to perform each method, and describe what causes sterilization failure and what to do when failure is detected.	READ – Textbook (pp. 121-132) • Procedure 13.2 (p. 129) • Procedure 13.3 (p. 130) • Procedure 13.4 (p. 131) ANSWER – Textbook Review Questions 3, 6-8, 15, 16, 18 (p. 140)		
Week 5 Objectives: 1,4,5,6	**Lab:** Class Activities • Practice the steps of instrument processing		**Lab Competencies:** Barrier/De-barrier Operatory Room Disinfection Dental Unit Water Asepsis	
Week 6 Objectives: 4, 5, 6	**Lecture**: Instructor presentation and class activities **Ch. 13 Instrument Processing (continued)** Describe how to handle, store, and distribute sterilized instruments to maintain sterility.	READ – Textbook (pp. 132-133)		
	Describe the factors to consider when designing a sterilization facility within a dental office.	READ – Textbook (pp. 133-135)		
	List considerations of infection control when sharpening instruments and tips for protecting dental instruments.	READ – Textbook (pp. 135-136)		

	Describe how to sterilize handpieces and heat-sensitive instruments.	READ – Textbook (pp. 136-137) Procedure 13.5 (p. 136) ANSWER – Textbook Review Question 14 (p. 140)	
	List other methods of sterilization and properties of decontamination and sterilization equipment and products.	READ – Textbook (pp. 137-139) Procedure 13.6 (p. 137) Case Scenarios: Instrument Processing (p. 139) Sterilization (p. 139) Biological Monitoring (p. 139) Chemical Monitoring (p. 139) REVIEW – Evolve Student Resources Practice Quizzes	
Week 6 Objectives: 4, 5, 6	**Lab:** Practice the steps of instrument processing	Study for Competency on Instrument Processing	
Online Test Ch. 13 Due by			**Online Test Ch. 13**
Week 7 Course Objective: 8, 10	Lecture: Instructor presentation and class activities **Ch. 6 Bloodborne Pathogens** Define bloodborne diseases and pathogens, and explain why an understanding of these diseases I important to the practice of dentistry.	READ – Textbook (p. 41) CREATE Students create key term flashcards with terms on one side and the definitions on the other side. WRITE Students write a 1-page report about bloodborne pathogens and why understanding these diseases is important in the practice of dentistry. Papers should be turned in to the online drop box. READ – Textbook (pp. 41-46) ANSWER – Textbook	**Graded Assignment Ch. 6 Bloodborne pathogens** Read the case scenario: Hepatitis B (p. 49) After reading the scenario, answer the following questions: -What breaches in infection prevention occurred? -What are some potential consequences of these breaches? -What regulations from the Occupational Safety

		Review Questions 1, 6-9, 12 (pp. 49-50) RESEARCH Divide the class into groups and assign each group one of the types of hepatitis. They should research how it is transmitted and treated and come to class prepared to present their findings. Ask students to access the Internet and research information about HBV exposure to health care workers. They will use this information for an online activity.	and Health Administration (OSHA) and/or recommendations from the Centers for Disease Control and Prevention (CDC) are relate to these scenarios? You may work with a classmate on this assignment. Make sure both names are on the assignment. Post to assignments on BB LMS.
	Compare the five major types of viral hepatitis, and describe the relative infectivity of viral hepatitis after an occupational exposure.	READ – Textbook (pp. 41-46) ANSWER – Textbook Review Question 3 (p. 49)	
	Describe the antigens and antibodies related to the different types of hepatitis.	READ – Textbook (pp. 46-49) Case Scenarios: Hepatitis B (p. 49) ANSWER – Textbook Review Questions 2, 4, 5, 10, 11 (pp. 49-50) REVIEW – Evolve Student Resources Practice Quiz	
	Describe the relative infectivity of HIV after an occupational exposure, and list ways to prevent the spread of HIV.	READ – Textbook (pp. 62-65) ANSWER – Textbook Review Questions 4-6 (pp. 77-78) CREATE Students create key term flashcards with terms on one side and the definitions on the other side.	
Test Ch. 6 Due			**Test Ch. 6**

Week 7 Course Objectives: 8, 10	Lab: • HBV Exposure Activity • Practice Instrument Processing: Ultrasonic cleaner, preparing and autoclaving Instruments, biological & chemical monitoring, sterilizing a dental handpiece, following a sterilization failure • Practice Skill Competency: Following an exposure incident Practice Instrument processing for competency	Study competency form for instrument processing	
Week 8 Course Objectives: 8, 9	**Lecture**: Instructor presentation and class activities **Ch. 8 Infection Control Rationale and Regulations** Describe the rationale for performing infection control procedures, the pathways by which microbes may be spread, and which infection control procedures can be used to interfere with the different pathways of microbial spread in the dental office.	READ – Textbook (p. 65) RESEARCH Divide students into groups and assign each group one or more of the six pathways of cross-contamination in dental offices. Have each group outline the source, mode of disease spread, and infection control procedure for its assigned category. Students should come to class prepared to give a short presentation on their findings.	
	Describe the goal of infection control.	READ – Textbook (pp. 65-67) ANSWER – Textbook Review Questions 1, 7 (pp. 77-78)	
	Describe the role played by governmental and professional organizations in dental infection control.	READ – Textbook (pp. 67-73) ANSWER – Textbook Review Questions 2, 3, 8, 9 (pp. 77-78)	
	Summarize the bloodborne pathogens standard from the	READ – Textbook (pp. 73-77) Case Scenarios: Postexposure Management (p. 77)	**Graded Assignment Case Scenario: Ch. 8**

	Occupational Safety and Health Administration.	Case Scenarios: Compliance with Regulations (p. 77) ANSWER – Textbook Review Question 10 (p. 78) REVIEW – Evolve Student Resources Practice Quiz	**Postexposure Mgmt. Compliance with Regulations** Read the case scenario: Read the Case Scenario Postexposure Management (p. 79) After reading the scenario, answer the following: 1. List potential opportunities for disease transmission in this scenario. 2. Which preventive measures could have been used? 3. List at least one regulation from OSHA and one from CDC related to postexposure management. Post to BB LMS.
	Summarize the *Recommendations for Infection Control in Dentistry* from the Centers for Disease Control and Prevention.	Graded Discussion Assignment: Infection Control (on BB)	**Graded Discussion Assignment: Infection Control (on BB)**
Week 8 Course Objectives: 8, 9	**Lab:** Competency Instrument Processing (Students will come at individually scheduled time to complete competency.)		**Lab Competency Instrument Processing**
Onnline Test Ch. 8 Due			**Online Test Ch. 8**

Week 9 Course Objectives: 1, 2, 3, 4, 5, 6, 7	**Lecture**: Instructor presentation and class activities **Ch. 20 Asepsis Protocols** Describe what is meant by safety culture, and how to maintain safety culture.	READ – Textbook (p. 187) CREATE Have students create key term flashcards with terms on one side and the definitions on the other side.	
	Describe the "behind the scenes" types of infection control preparation necessary in a dental office.	READ – Textbook (pp. 187-189)	
	Describe the necessary general preparation of the reception and clinical areas of the dental office.	READ – Textbook (p. 189)	
	Describe infection control procedures to be used before seating the patient.	READ – Textbook (pp. 189-190) ANSWER – Textbook Review Question 1 (p. 195)	
	Describe infection control procedures used after the patient is seated but before beginning the actual treatment.	READ – Textbook (p. 190) ANSWER – Textbook Review Question 4 (p. 195)	
	Describe the infection control procedures to be performed during patient treatment.	READ – Textbook (pp. 190-191)	
	Describe infection control procedures to be performed after the patient appointment is completed.	READ – Textbook (pp. 191-193) ANSWER – Textbook Review Questions 2, 3, 5 (p. 195)	
	Describe infection control procedures to be performed when taking radiographs.	READ – Textbook (pp. 193-194)	
	Describe infection control procedures for laboratory asepsis.	READ – Textbook (pp. 194-195) Case Scenarios: Asepsis Protocols (p. 194)	**Graded Assignment Case Scenario: Ch. 20**

		Case Scenarios: Standard Operating Procedures (p. 195) REVIEW – Evolve Student Resources Practice Quizzes	**Asepsis and Standard Operating Procedures** After reading the case scenario Standard Operating Procedure on page 203 in the text, using the online discussion platform on BB LMS: -Identify potential opportunities for disease transmission in this scenario. -Then discuss which preventive measures should be used. -Respond to at least two classmate's discussion to compare and contrast with your opinions on this scenario.
Week 9 Course Objectives: 1, 2, 3, 4, 5, 6, 7	**Lab:** Class Activities Create asepsis protocols for DCB's dental program in groups. Compare and combine best parts of all plans to create the best protocols. Competency Instrument Processing- if not completed.		
Online Test Ch. 10 & 20 Date			**Online Test Ch. 10 & 20**
Week 10 Course Objectives:	**Lecture**: Instructor presentation and class activities **Ch. 10 Immunization**	READ – Textbook (pp. 85-88) Table 10.1 (pp. 87-88) CREATE Students create key term flashcards with terms on one	

3, 10, 11	State the importance of immunization in the health care field and identify vaccine-preventable diseases.	side and the definitions on the other side.	
	Describe the diagnosis, microbiology, onset, and symptoms and immunization and boosters of tetanus.	READ – Textbook (p. 86) ANSWER – Textbook Review Questions 1, 2 (p. 92)	
	List the types of influenza, symptoms, process of influenza vaccinations, and the CDC recommendations for influenza vaccinations.	READ – Textbook (pp. 86, 89) ANSWER – Textbook Review Questions 3, 4, 6 (pp. 92-93)	
	Discuss how hepatitis is transmitted, the occupational hazards of hepatitis B, and the importance and process of hepatitis B vaccinations.	READ – Textbook (pp. 90-91) ANSWER – Textbook Review Question 5 (p. 92)	
	Discuss the risks associated with missing important vaccines.	READ – Textbook (pp. 91-92) Case Scenarios: Vaccination (p. 92) REVIEW – Evolve Student Resources Practice Quiz	**Graded Assignment Case Scenario: Vaccination** After reading the case scenario Standard Operating Procedure on page 203 in the text, using the online discussion platform on BB LMS: -Identify potential opportunities for disease transmission in this scenario. -Then discuss which preventive measures should be used. -Respond to at least two classmate's discussion to compare and contrast with your

			opinions on this scenario.
	Ch. 18 Waste Management Identify the federal agencies that regulate dental waste and design an acceptable action plan for the management of regulated dental waste.	READ – Textbook (p. 176) ANSWER – Textbook Review Question 2 (p. 180) CREATE Have students create key term flashcards with terms on one side and the definitions on the other side.	
	Describe and differentiate the two basic types of waste generated in a dental office.	READ – Textbook (pp. 176-177) ANSWER – Textbook Review Question 1 (p. 180)	
	List the five types of regulated dental waste and discuss the proper handling of blood and pathogenic waste.	READ – Textbook (pp. 177-178) ANSWER – Textbook Review Questions 3, 4 (p. 180)	
	Describe the proper use of sharps containers.	READ – Textbook (pp. 178-180) Case Scenarios: Waste Management (p. 180) ANSWER – Textbook • Review Question 5 (p. 180) REVIEW – Evolve Student Resources Practice Quizzes READ – Textbook (pp. 177-178) ANSWER – Textbook Review Questions 3, 4 (p. 180) Answer Graded Discussion on BB on Waste Management	**Graded Assignment Case Scenario Ch. 18 Waste Management Assignment**: After reading the case scenario Waste Management in the text, using the online discussion platform on BB LMS: -Identify potential opportunities for disease transmission in this scenario. -Then discuss which preventive measures should be used. -Respond to at least two classmate's

			discussion to compare and contrast with your opinions on this scenario.
Week 10 Course Objectives: 3, 10, 11	**Lab:** Class Activities • Restest any skill competencies not passed • Skill competency Following an Exposure Incident • Clinic and Sim lab walk through; create a plan on how to handle DCB's dental waste		
Online Test Ch. 18 Waste Mgmt. Due			**Online Test Ch. 18 Waste Mgmt.**
Week 11 Course Objectives: 12, 13	**Didactic portion:** online see student assignments **Part 1 Emergency Preparedness** Chapter 1 Introduction Competencies 1. Become familiar with ASA Physical Status Classifications 2. Become familiar with Emergency Team Structure in the dental practice 3. Become familiar with Emergency Treatment Record Chapter 2 The Emergency Kit Competencies 1. Explain the essential components of an	1. Read chapters 1, 2, 3, 4. Follow along with PPT. 2. Answer Review questions for each chapter. Bring to lab. 3. Develop an index file with headings for each medical emergency we will study throughout the section on medical emergencies. (You will be contributing to this file, with symptoms and treatment, for use in clinical practice.) 4. Complete graded assignment on BB: taking vital signs 5. Read Chapter 15 Allergic Reactions. Follow along with PPT.	**Assignment on BB: Take vital signs on four family members or friends prior to the next class. Submit them to BB.** They will be used for lab activity. This is not graded.

	emergency kit in the dental office. 2. List the nonessential components of an emergency kit in the dental office. 3. Discuss adult and pediatric doses of essential emergency drugs. Chapter 3 Vital Signs Competencies 1. Discuss the importance of taking and recording the body's vital signs 2. Describe and practice the process for taking pulse, respiration and blood pressure on student partner. 3. Differentiate normal from abnormal vital sign readings. Chapter 4 Oxygen Administration Competencies 1. Explain the various methods of oxygen administration. 2. Discuss the armamentarium associated with oxygen administration. 3. Explain the proper methodology for oxygen administration. 4. Practice the R.E.P.A.I.R. system for management of medical emergencies in the dental practice Ch. 15 Allergic Reactions Course Competencies	6. Develop a chart listing each type of allergic reaction (mild, moderate, severe) including their symptoms and treatment to put in your medical emergencies file. 7. Study the treatment for Allergic Reactions using the REPAIR system, before lab. 8. Complete the test on BB on Ch. 1-4 and Ch. 15.	

	1. Discuss the pathophysiology of an allergic reaction. 2. Compare and contrast specific signs and symptoms associated with mild, moderate, and severe allergic reactions. 3. Determine suggested treatment modalities for each type of allergic reaction. 4. Explain the steps needed to prepare an office for a patient experiencing an allergic response. **5.** Practice through role-play a patient with a mild, moderate, and severe allergic reaction, with one student exhibiting the symptoms and the other providing the appropriate treatment.		
Week 11 Course Objectives: 12, 13	**Lab:** • Practice taking vital signs on classmates. • Demonstrate preparation and placement of oxygen. • Role play the emergency Team Structure • Select a drug from the emergency kit. Student will explain the emergency for which it's used. • Role play a patient with an allergic reaction, with one student exhibiting the		

	symptoms and the other providing the appropriate treatment. • Using patient medical histories provided by the instructor, assess the appropriate ASA classification.		
Online Test Ch. 1 – 4 and 15			Online Test Chapters 1 – 4 and 15
Week 12 Course Objectives: 12, 13	**Didactic portion:** online see student assignments **Ch. 5 Syncope** **Chapter Competencies** Compare and contrast the various types of syncope. Determine specific signs and symptoms associated with syncope. List suggested treatment modalities for syncope. Explain the steps needed to prepare an office for a patient experiencing a syncopal episode. **Ch. 9 Cerebrovascular Accident (CVA) Competencies** Differentiate the types of cerebrovascular accident (CVA), ischemic versus hemorrhagic. Discuss the concept of TIA and its relation to CVA. Discuss the pathophysiology of both forms of CVA.	1. Read Ch. 5 Syncope. Follow along with PPT. 2. Answer Review Questions. 3. Develop a chart with each type of syncope and their etiology and treatment to put in your medical emergency file. 4. Read Ch. 9 Cerebrovascular Accident. Follow along with PPT. 5. Answer Review Questions. 6. Develop a chart showing the different types of CVA and the signs and symptoms and treatment of each for your medical emergencies file. 7. Study the REPAIR treatment for syncope and CVA prior to lab practice. 8. Study for and take online test for Ch. 5 and 9.	

	List specific signs and symptoms associated with CVA. Determine suggested treatment modalities for patients experiencing either type of CVA. Explain the steps needed to prepare an office for a patient experiencing CVA. Discuss precautions to be taken if the patient were to return to the office following a CVA.		
Week 12 Course Objectives: 12, 13	**Lab activities:** • Practice taking vital signs • Practice oxygen procedure. • Demonstrate, through role play, how to respond to a patient who is having experiencing *syncope*. • Demonstrate, through role play, how to respond to a patient who is having experiencing a CVA. • Review treatment for allergic reactions.		
Online Test Ch. 5 & 9 Date			Online Test Ch. 5 & 9
Week 13 Course Objectives: 12, 13	**Didactic portion:** online see student assignments **Ch. 8 Seizure Disorders** 1. Discuss the pathophysiology of seizures.	Assignment: 1. Read Ch. 8 Seizures. Follow along with PPT. 2. Answer Review Questions	

	2. Differentiate between partial and generalized seizures. 3. Discuss the etiologies of seizures. 4. List specific signs and symptoms associated with seizures. 5. Determine suggested treatment modalities for seizures. 6. Explain the steps needed to prepare an office for a patient experiencing a seizure. **Ch. 13 Asthma** 1. Discuss the pathophysiology of asthma. 2. Identify the specific signs and symptoms associated with asthDescribe the different types of asthma. 3. Explain the treatment modalities for asthma. 4. Determine appropriate emergency steps for patients experiencing an asthmatic attack. 5. Practice, through role play, the emergency treatment for seizures.	3. Formulate a chart showing the different types of seizures fand treatment for your medical file. 4. Read Ch. 13 Asthma. Follow along with PPT. 5. Answer Review Questions. 6. Formulate a chart with signs and symptoms of each type of asthma and treatment for you medical file. 7. Study REPAIR treatment for Seizures and Asthma before lab. 8. Study for and take online test Ch. 8 and 13.	
Week 13 Course Objectives: 12, 13	**Lab:** Lab activities • Practice taking vital signs • Demonstrate, through role play, how to respond to a patient		

	who is having breathing problems such as asthma, with one student exhibiting the symptoms and the other providing the appropriate treatment. • Demonstrate, through role play, a patient with a GTCS and generalized absence seizures, with one student exhibiting the symptoms and the other providing the appropriate treatment.		
Online test Ch. 8 & 13 Due			Online test Ch. 8 & 13
Week 14 Course Objectives: 12, 13	**Didactic portion:** online see student assignments Ch. 10 Angina Pectoris and Acute Myocardial Infarction Competencies 1. Discuss the factors that increase the risk for development of coronary artery disease. 2. Describe the pathophysiology associated with the development of coronary artery disease. 3. Describe the factors that may precipitate an anginal attack or myocardial infarction. 4. Differentiate between the various forms of angina pectoris (including presentation of symptoms).	Assignment: Didactic 1. Read Ch. 10 Angina Pectoris and Acute Myocardial Infarction. Follow along with PPT. 2. Answer Review Questions. 3. Develop a chart listing signs and symptoms for Angina and MI for your medical file. 4. Read Ch. 12 Cardiac Pacemaker. Follow along with PPT. 5. Answer Case Study Scenario. Bring answers to lab for class discussion. 6. Answer Review Questions. 7. Develop a chart listing signs and symptoms for	

	5. Differentiate between chest pain that is cardiac-related and non-cardiac-related chest pain. 6. Describe the procedure for the management of a dental patient experiencing an anginal attack. 7. Differentiate between the symptoms associated with an anginal attack and symptoms associated with a myocardial infarction. 8. Describe the procedure for the management of a dental patient experiencing a myocardial infarction. 9. Describe the procedure for the management of a dental patient experiencing cardiac arrest. 10. Demonstrate, through role play, a patient with angina, and a patient experiencing a myocardial infarction, with one student exhibiting the symptoms and the other providing the appropriate treatment. Ch. 12 Cardiac Pacemaker Competencies 1. Discuss the conditions warranting a pacemaker or an implantable cardioverter defibrillator (ICD).	Pacemaker malfunction for your medical file. 8. Study REPAIR treatment for Angina, MI and Cardiac Pacemaker before lab. 9. Study for and take online test Ch. 10 and 12.	

	2. List specific signs and symptoms associated with pacemaker or ICD malfunction 3. Determine suggested treatment modalities for cardiac pacemaker or ICD malfunction. 4. Explain the special precautions that should be taken in order to prevent a patient from experiencing a pacemaker or ICD malfunction. 5. Demonstrate, through role-play a patient with pacemaker malfunction, with one student exhibiting the symptoms and the other providing the appropriate treatment.		
Week 14 Lab	Lab Activities: • Practice taking vital signs • Demonstrate, through role play, how to respond to a patient who is experiencing a myocardial infarction, *angina and cardiac pacemaker,* with one student exhibiting the symptoms and the other providing the appropriate treatment. • Review previous medical emergency treatment studied.		
Online Test Ch. 10 & 12 Due			Online Test Ch. 10 & 12

Week 15 Course Objectives: 12, 13	**Didactic portion:** online see student assignments **Ch. 7 Hyperventilation** 1. Discuss the pathophysiology of hyperventilation 2. List specific signs and symptoms associated with hyperventilation 3. Determine suggested treatment modalities for hyperventilation 4. Explain the steps needed to prepare an office for a patient experiencing hyperventilation 5. Role play a patient with hyperventilation, with one student exhibiting the symptoms and the other providing the appropriate treatment. **Ch. 15 Allergic Reactions** 1. Discuss the pathophysiology of an allergic reaction. 2. Compare and contrast specific signs and symptoms associated with mild, moderate, and severe allergic reactions. 3. Determine suggested treatment modalities for each type of allergic reaction. 4. Explain the steps needed to prepare an office for a patient experiencing an allergic response.	Assignment: 1. Read Ch. 15 Allergic Reactions. Follow along with PPT. 2. Develop a chart listing each type of allergic reaction (mild, moderate, severe) including their symptoms and treatment for your medical emergencies file. 3. Answer discussion questions 1 & 2 for Ch. 15. 4. Complete Review questions for Ch. 15. 5. Read Ch. 7 Hyperventilation. Follow along with PPT. 6. Answer Case Scenario for Ch. 7. Bring answers to lab for class discussion. 7. Develop a chart for hyperventilation, including signs, symptoms, and treatment for your medical file. 8. Complete Review questions for Ch. 7. 9. Study REPAIR treatment sheet for Hyperventiliation and Allergic Reactions before lab. 10. Study for and take online test on Ch. 7 and 15 on BB. 11. Study the REPAIR Treatment forms for each medical emergency studied in this course. Final	

		Exam will be competencies on these medical emergencies.	
Week 15 Course Objectives: 12, 13	**Lab activities:** • **Competency: Vital signs** • Demonstrate, through role play, how to respond to a patient who is experiencing a **hyperventilation**, with one student exhibiting the symptoms and the other providing the appropriate treatment. • Demonstrate, through role play, a patient with a **mild, moderate, and severe allergic reaction**, with one student exhibiting the symptoms and the other providing the appropriate treatment.		Competency Vital Signs
Online Test Ch. 7 & 16			Online Test Ch. 7 & 16
Week 16 Course Objectives: 12, 13	**Lab activities:** Skill competencies Medical Emergencies Students will be drawing for specific emergencies to role play.	Study the REPAIR Treatment forms for each medical emergency studied in this course. Final Exam will be competencies on these medical emergencies.	**Skill Competencies Medical Emergencies**