

SYLLABUS

COURSE: DENF 1651 Foundational Skills for Clinic
SEMESTER: Fall
CREDIT HOURS: 1.5

REVISED: 2009
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COURSE DIRECTOR: Veronique F. Delattre, D.D.S., F.A.G.D., D.A.B.F.O

GOAL

The student will be able to know, do, and/or recognize the following by the end of the first section of this course:

1. Importance of infection control in the clinical setting and the practical maintenance of barriers to infection in the operatory: i.e. disposal of infectious waste, dress requirements for clinic (patient and student eye protection, masks, gloves, gown).
2. Health Insurance Portability and Accountability Act (HIPAA) – the goal is to create an awareness of HIPAA and its impact on students' clinical activities as they relate to patient privacy and confidentiality.
3. Vital signs - the proper methods of obtaining critical information concerning the patient's physiological status.
4. Dental Auxiliary Utilization (DAU) - The goal is to introduce the students to the principles of fourhanded dentistry. The student will also learn communication skills along with proper positioning of operator and patient.
5. Students will learn how to evaluate and treat a patient who sustains cardiac arrest in the dental office or an airway obstruction, through the techniques of CPR and Foreign Body Airway Obstruction. Students also will learn how to recognize the early warning signs of a heart attack and the life style changes that may help prevent cardiac arrest.
6. Electronic Patient Records – The goal is to introduce the students to the principles of electronic patient records and learn to use the UTDB system.

The second section of this course will allow the student to apply the information learned in the first section:

7. Observe chair-side and assist third and fourth year dental students and post-graduate students in UTDB clinics.
8. Demonstrate proper infection control standards while in the clinic.
9. Obtain accurate vital signs on patients.
10. This course will prepare the student for the second year Introduction to Clinic course.

OBJECTIVES

I. INFECTION CONTROL IN DENTISTRY (UTDB Clinic Manual)

1. Define infection, cross-infection, and infection control.
2. Describe why dental care professionals are at increased risk of cross-infection.
3. Identify the major source of contamination of the dental operator.
4. Define:
 - 4.1 disinfection
 - 4.2 disinfectant
 - 4.3 sterilization
5. List the basic guideline for infection control regarding sterilization and disinfection.
6. List the types of microorganisms affected by high, intermediate or low levels of germicidal action.
7. List two examples of chemical disinfectants in each of the low, intermediate and high germicidal action categories.
8. List examples of areas that should be covered with surface covers in addition to disinfection.
9. Identify the guidelines that are to be followed when treating a latex allergy patient or when a latex allergy is suspected.
10. Describe the significance of hands to disease transmission from patient to dentist and from dentist to patient.
11. Describe the proper procedure for hand washing and recommended frequency.
12. Describe the requirements for infection control as they relate to the following:
 - 12.1 clothing
 - 12.2 hair
 - 12.3 jewelry
 - 12.4 fingernails

II. INFECTIOUS DISEASES OF IMPORTANCE IN DENTISTRY (DB Clinic Manual)

1. Describe the similarities and differences among Hepatitis A, Hepatitis B, Hepatitis C, and Hepatitis D in the following categories:
 - 1.1 viral agent
 - 1.2 mode of transmission
 - 1.3 clinical features
2. Describe the risks of viral hepatitis to dentists.

3. Define acquired immunodeficiency syndrome (AIDS).
4. Describe the Human Immunodeficiency Virus (HIV) and its modes of transmission.
5. Describe the risk of occupational HIV transmission to health care workers.
6. Identify policies and procedure handling Tuberculosis in the UT Dental Branch Clinics.

III. PRECAUTIONS USED IN INFECTION CONTROL
(DB Clinic Manual)

1. Describe the uses and benefits of:
 - 1.1 gloves
 - 1.2 masks
 - 1.3 protective eyewear
 - 1.4 clinic attire
 - 1.5 rubber dam
 - 1.6 surface covers
2. Describe the uses of the following types of gloves:
 - 2.1 non-sterile latex gloves
 - 2.2 sterile surgical gloves
 - 2.3 overgloves
 - 2.4 utility gloves
3. List three other measures than can be used to reduce cross-infection in the dental operatory.
4. Describe the following terms as they relate to dentistry:
 - 4.1 sharps
 - 4.2 human tissues removed during surgery
 - 4.3 blood/saliva-soaked materials
5. Describe the proper means of handling needles in the operatory.
6. Describe three general types of "needle stick" exposures.
7. Describe the proper method for disposing of the items listed in #4.
8. Describe the following terms:
 - 8.1 infectious waste
 - 8.2 contaminated waste
 - 8.3 hazardous waste
 - 8.4 medical waste
9. Describe waste materials that must be placed in red biohazard bags in the clinic.
10. List the proper way to handle and dispose of amalgam.
11. List three regulatory agencies with which the Dental Branch complies in its infection control regulations.

12. Name the primary disinfectants used in the UTDB clinics for disinfection of surfaces, impressions and immersion; state how often it is changed.
13. Describe three acceptable methods of applying disinfectants.
14. Identify the areas of the operatory in the field of contamination.
15. Describe the sequence of procedures for preparation of the operatory for treating the patient and for decontamination of the operatory after the patient is dismissed.
16. Describe the importance of cleaning the dental unit water lines in the operatory and demonstrate how that is done.
17. List items to be disinfected before leaving the operatory for additional laboratory procedures.
18. Describe the method of disinfecting a dental impression.
19. Describe when and how stone and plaster casts must be disinfected.
20. List barriers/attire to be worn when polishing dentures with a lathe.
21. Describe infection control procedures for polishing acrylic resin in the laboratory.
22. Describe the protocol for polishing/disinfecting metal prostheses.
23. Describe the rationale for the use of separate instruments, attachments, and materials for new prostheses/appliances and those which have already been inserted into the mouth.

IV. INSTRUMENTS AND HANDPIECES (DB Clinic Manual)

1. Identify and describe the four steps included in instrument processing.
2. Identify protective equipment that must be worn when cleaning instruments.
3. Describe the steps to follow in cleaning instruments before returning to the dispensary.
4. Describe the steps to follow in cleaning a handpiece before returning to the dispensary.

V. HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT (HIPAA)

1. Identify protected health information (PHI) and associated policies and procedures necessary to safeguard PHI.
2. Distinguish between privacy and security issues as related to patient care.
3. Be aware of the consequences for non-compliance with HIPAA regulations.

VI. VITAL SIGNS

1. Name the four primary vital signs.
2. Name four secondary signs that should be noted in a physical examination.

VII. PULSE

1. Define characteristics that should be noted when taking the pulse, including:
 - 1.1 rate
 - 1.2 rhythm
 - 1.3 tension
 - 1.4 form
 - 1.5 amplitude
2. Distinguish between bradycardia and tachycardia.
3. Locate the following pulses with proper finger technique:
 - 3.1 radial
 - 3.2 temporal
 - 3.3 brachial
 - 3.4 carotid

VIII. RESPIRATION

1. List four characteristics that should be noted about respiration.
2. Distinguish among the following:
 - 2.1 apnea
 - 2.2 hyperpnea
 - 2.3 tachypnea
 - 2.4 dyspnea

IX. BLOOD PRESSURE

1. Distinguish between systolic, diastolic and pulse pressure.
2. Briefly define the following terms related to hypertension:
 - 2.1 labile
 - 2.2 primary
 - 2.3 secondary
3. Describe the proper technique for determining blood pressure by:
 - 3.1 palpatory method
 - 3.2 auscultatory method
4. Describe the characteristics of Phase I, IV, & V of the Korotkoff sounds.
5. Describe the auscultatory gap and its clinical implications.
6. State the benefit of using the 3-number notation for recording blood pressure. State the number will you record if there is no Phase V identified.
7. State the benefit of taking TWO separate blood pressure readings on each of your patients. State which you would expect to be more valid or representative of the true pressure. State if both sets of numbers should be recorded. State how these numbers can be used in planning future appointments.

8. If you "miss the systolic or diastolic points while dropping cuff pressure, state if it is important to drop the cuff pressure to zero before repeating the determination. Describe why it is important.
9. Define the primary determinants of systolic and diastolic blood pressures. (Include parameters of "cardiac contractility", "peripheral resistance" and "heart rate".)
10. State how each of the following factors affects blood pressure:
 - 10.1 Intense cold
 - 10.2 intense heat and humidity
 - 10.3 blood volume
 - 10.4 hematocrit
 - 10.5 old age and atherosclerosis
11. Describe how anxiety can affect blood pressure and heart rate.
12. Describe how long-standing (i.e. chronic) hypertension can affect the heart and vascular system.
13. Describe how hypertension affects myocardial oxygen consumption.
14. Describe the correlation between hypertension and (a) coronary artery disease, (b) stroke, and (c) kidney disease.

X. BODY TEMPERATURE

Describe how to obtain the body temperature by the axillary and sublingual methods and indicate typical values for each.

XI. VITAL SIGNS LABORATORY

Demonstrate the proper techniques for determining pulse, respiration, blood pressure (by palpatory and auscultatory methods), and body temperature. Using your laboratory classmate as a practice subject, obtain and record the data on the form provided. The completed form will be "approved by the laboratory instructor. Each student will retain his or her own data sheet of vital signs: temperature, pulse, blood pressure and respiratory rate.

XII. CARDIOPULMONARY RESUSCITATION

1. Define emergency cardiac care ("ECC").
2. Define basic life support ("BLS").
3. Define cardiopulmonary resuscitation ("CPR").
4. State indications for basic life support.
5. Define artificial ventilation.
6. Define artificial circulation.
7. State pitfalls in performance of CPR.
8. Define clinical death, biological death.

XIII. RECOGNITION OF UNCONSCIOUSNESS

1. State three conditions which may be associated with unconsciousness.
2. State the critical time period in which CPR must be begun.
3. List the first two steps of CPR.

XIV. OPENING THE AIRWAY

1. Describe how to determine if a victim is breathing.
2. State the most common airway obstruction.
3. Describe how to determine if an airway is opened or blocked.
4. Describe how to determine if there is an error in technique.

XV. RESCUE BREATHING

1. State the rate of rescue breathing for an infant, a child, and an adult.
2. Describe the methods for determining if the rescue breathing efforts are effective.

XVI. EXTERNAL CARDIAC COMPRESSION

1. Describe how to check for a carotid pulse.
2. Define cardiac arrest.
3. Define artificial circulation.
4. Define external cardiac compression.
5. State the method of locating correct position for the hands in external cardiac compression.
6. Describe the following aspects of external cardiac compression:
 - 6.1 method of exerting downward pressure
 - 6.2 distance of the stroke
 - 6.3 body position of the victim
 - 6.4 body position of the rescuer or rescuers
7. State the number of compressions performed per minute.
8. State possible errors in compression technique.
9. Demonstrate the ability to recognize pitfalls and complications for special resuscitation situations.
10. Demonstrate the ability to utilize an Automated External Defibrillator (AED), a pocket mask and a bag-valve-mask.

11. Demonstrate the ability to perform all of the steps of CPR on a manikin for a period of one minute without error, according to the performance test criteria for Basic Life Support.
12. Demonstrate the ability to perform resuscitation on an infant manikin.
13. Demonstrate the ability to perform the obstructed airway maneuver for a conscious and unconscious victim.
14. Given case study examples of emergency situations, select the sequence and technique to give emergency aid to these victims.
15. Given illustrations of any step in the performance of CPR, determine those which show incorrect procedures and identify the errors seen in the other illustrations.

XVII. MEDICAL LEGAL ASPECTS OF CPR

1. Define the Good Samaritan Act.
2. Describe your legal liabilities with respect to CPR in the dental office.
3. State the "Normal Standard of Care."

XVIII. HISTORY AND PHILOSOPHY OF DENTAL AUXILLARY UTILIZATION (D.A.U.)

1. List the factors that contributed to the development of the concepts of fourhanded dentistry.
2. Define and state the aim of ergonomics.
3. Describe the general objective of four-handed dentistry.
4. Describe the main advantage of the team approach to dentistry.
5. List the requirements for equipment necessary to implement DAU principles.

XIX. PRINCIPLES OF DENTAL AUXILLARY UTILIZATION (D.A.U.)

1. List the principles of DAU.
2. List the postural criteria for the dentist, the assistant and the patient.
3. List the five categories of motion classification.
4. Describe a method to color code and sterilize instruments for a typical general practice dental office.

XX. ZONES OF ACTIVITY

1. Describe the two ways of referring to the positioning of the dentist and dental assistant in relation to the patient.
2. Describe the zones of activity for a right-handed dentist.
3. Describe the zones of activity for a left-handed dentist.

4. Describe each relative position that may be used in the operator's zone for both a right-handed and left-handed dentist.
5. Describe correct positions for the dentist, dental assistant, and patient for each quadrant of the mouth.

XXI. INSTRUMENT TRANSFER

1. Explain the importance of efficient instrument transfer to DAU.
2. Explain the importance of a third finger rest in instrument transfer.
3. Describe the circumstances where finger rest may be broken.
4. Describe methods of instrument transfer.
5. Describe the various instrument grasps and give examples of instruments that are held by each grasp.
6. Describe a complete instrument transfer for each instrument grasp. Include passage of the anesthetic syringe.

XXII. UTDB CLINICS

1. Describe the history of the Dental Branch
2. Understand the mission of the Dental Branch
3. Understand the Clinical Teaching Model at UTDB
4. Describe the Clinical Practices
5. Describe the Practice Foundations, i.e. the foundational elements of the clinical teaching model for the predoctoral dental student program
6. Describe the Practice Administration individuals and their roles
 - 6.1 Practice Leaders
 - 6.2 Primary Bay Instructors
 - 6.3 Dental Hygiene Facilitators
 - 6.4 Director, Predoctoral Clinical Education
 - 6.5 Associate Dean for Patient Care
7. Describe the operation of the Predoctoral Clinics
 - 7.1 Diagnostic Clinics
 - 7.2 Discipline ("Specialty") Clinics
 - 7.3 Primary Bay Clinics (3rd & 4th year DDS Students)
8. Describe the clinic hours of operation
 - 8.1 Third-year primary Bays & Discipline Clinics
 - 8.2 Fourth-year Primary Bays
 - 8.3 Rotation Clinics
 - 8.4 Dental Hygiene & Postdoctoral Clinics

9. Describe the Clinic Rounds at UTDB
10. Describe the Third-year Practices
 - 10.1 General information
 - 10.2 Primary Bay Protocol
 - 10.3 Clinical Reporting and attendance
 - 10.4 Patient Appointments
 - 10.5 Canceling a patient's appointment
11. Describe the Fourth-year Practices
 - 11.1 General information
 - 11.2 Guidelines for endodontic procedures performed in fourth-year primary bays
 - 11.3 Primary bay protocol
12. Describe the Management of Practice Patients
 - 12.1 Appointment scheduling and timeliness of care
 - 12.2 Patient management
 - 12.3 Fiscal and record management
 - 12.4 Professionalism
 - 12.5 Clinic incident reports

XXIII. CLINICAL RELEVANCE OF THE BASIC SCIENCES

1. Describe the correlation between the basic sciences learned in a dental school environment and the subsequent use of that information in making clinical decisions.
2. Understand the importance of the basic sciences in the diagnosis and treatment planning of patients.

XIV. ELECTRONIC PATIENT RECORDS AND UTDB'S EPR

1. Learn the principles of electronic patient records
2. Learn to use the UTDB system through participation in simulation exercises.
3. Demonstrate proficiency in UTDB's EPR through entering progress notes during assist/observe clinic sessions.

RESOURCES

I. Media Resources

A. Printed media

1. Supplemental textbooks

Cardiopulmonary Resuscitation
American Heart Association
BLS for Healthcare Providers

2. Class handouts

B. Non-print media

1. Electronic media

Blackboard

1651 Course Blackboard

Course Documents, Course Schedule, Session Information, Session Handouts
www.db.uth.tmc.edu

UTDB Clinics

Website

Title: UTDB Clinic Manual

Introduction, pp. i through iii

General Information, pp. 1.1 through 1.36

Clinical Education, pp. 5.1 through 5.14

Address: www.db.uth.tmc.edu

Infection Control

Website

Title: UTDB Clinic Manual, Section 2, pp. 2.1 through 2.42

Address: www.db.uth.tmc.edu

Cardiopulmonary Resuscitation

Website

Title: CPR Simulator

Address: www.cprsim.com

Vital Signs

Ravin, Abe, M.D.

Taking Blood Pressure: The Clinical Significance of the Sounds of Korotkoff

Merck Sharp and Dohme

www.blackboard.uth.tmc.edu

II. Human Resources

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STUDY PLAN AND REQUIREMENTS

- The course director will make group assignments during the first class session.
- Students must attend all scheduled lecture, laboratory, and clinic sessions as assigned.
- Students must successfully complete the mid-term examination and the final examination.

DENF 1651 FOUNDATIONAL SKILLS FOR CLINIC 2009 Fall Semester Schedule

#	Date	Time	Room	Group	Lecture / Lab	Facilitator	
1	Aug 17	M	1:00-1:30	340	All	Course Orientation	Delattre
			1:30-4:45	340	All	Clinical Relevance of Basic Sciences	Demian, Suchko
2	Aug 21	F	1:00-4:45	340	All	HIPAA /Patient Records /Pt Privacy	Chambers / Delattre
				340	All	Clinic Tours & Orientation	Delattre / Faculty, Staff
3	Aug 24	M	1:00-4:45	340	All	Infection Control Principles - Lecture	Adkisson
4	Aug 28	F	1:00-4:45	B54	1 & 2	Vital Signs – Lecture & Lab	McMahon / Faculty
				Sim Ctr	3 & 4	Dental Auxilliary Utilization – Lab	Franklin / Delattre
5	Aug 31	M	1:00-4:45	340	1	Infection Control – Lab preview	Adkisson
				N & P	1	Infection Control - Lab exercises	Adkisson / Delattre
6	Sep 4	F	1:00-4:45	B81	3 & 4	Vital Signs – Lecture & Lab	McMahon / Faculty
				Sim Ctr	1 & 2	Dental Auxiliary Utilization – Lab	Franklin / Delattre
	Sep 7	M				<i>Labor Day Holiday</i>	
7	Sep 11	F	1:00-4:45	340	All	Clinical Terminology & UTDB Clinics	Delattre
8	Sep 14	M	1:00-4:45	340	2	Infection Control – Lab preview	Adkisson
				N & P	2	Infection Control - Lab exercises	Adkisson / Delattre
9	Sep 18	F	1-4:45	340	All	Documentation & Standards of Care	Delattre

#	Date	Time	Room	Group	Lecture / Lab	Facilitator	
10	Sep 21	M	1-4:45	340	3	Infection Control – Lab preview	Adkisson
				N & P	3	Infection Control - Lab exercises	Adkisson / Delattre
11	Sep 25	F	1-4:45	Sim Ctr	All	Electronic Patient Record (EPR)	Valenza / Delattre / Faculty
12	Sep 28	M	1-4:50	340	4	Infection Control – Lab preview	Adkisson
				N & P	4	Infection Control - Lab exercises	Adkisson / Delattre
13	Oct 2	F	1–2:00	340	All	Protocol for Clinic Assisting - Lecture	Delattre
			2-4:45	per clinic schedule	All	Assist in Clinics	Delattre / Faculty
14	Oct 5	M	1-4:50	3.077	1	CPR Laboratory and Exam	Pate
			per clinic schedule	per clinic schedule	2, 3, 4	Assist in Clinics	Delattre / Faculty
15	Oct 9	F	1-2:50	207	All	Mid-Term Examination	Delattre / Faculty / Henshaw
16	Oct 12	M	1-4:45	3.077	2	CPR Laboratory & Exam	Pate
			per clinic schedule	per clinic schedule	1, 3, 4	Assist in Clinics	Delattre / Faculty
17	Oct 16	F	per clinic schedule	per clinic schedule	All	Assist in Clinics	Delattre / Faculty
18	Oct 19	M	12:30-4:45	3.077	3	CPR Laboratory and Exam	Pate
			per clinic schedule	per clinic schedule	1, 2, 4	Assist in Clinics	Delattre / Faculty
19	Oct 23	F	per clinic schedule	per clinic schedule	All	Assist in Clinics	Delattre Faculty
20	Oct 26	M	1-4:50	3.077	4	CPR Laboratory and Exam	Pate
			per clinic schedule	per clinic schedule	1, 2, 3	Assist in Clinics	Delattre / Faculty
21	Oct 30	F	per clinic schedule	per clinic schedule	All	Assist in Clinics	Delattre / Faculty
22	Nov 2	M	per clinic schedule	per clinic schedule	All	Assist in Clinics	Delattre / Faculty
23	Nov 6	F	per clinic schedule	per clinic schedule	All	Assist in Clinics	Delattre/Faculty
24	Nov 9	M	per clinic schedule	per clinic schedule	All	Assist in Clinics	Delattre / Faculty
25	Nov 13	F	per clinic schedule	per clinic schedule	All	Assist in Clinics	Delattre / Faculty
26	Nov 16	M	per clinic schedule	per clinic schedule	All	Assist in Clinics	Delattre / Faculty
27	Nov 20	F	per clinic schedule	per clinic schedule	All	Assist in Clinics	Delattre / Faculty

#	Date	Time	Room	Group	Lecture / Lab	Facilitator	
28	Nov 23	M	1-4:45	340	All	Overview of 2 nd , 3 rd , 4 th Year, and Post-graduate UTDB Clinics	Delattre / Faculty
	Nov 27	F				<i>Thanksgiving Holiday</i>	
29	Nov 30	M	1-4:45	B-20	as needed	Remediation for excused absences	Delattre / Faculty
30	Dec 4	F	1-2:50	207	All	FINAL EXAMINATION	Delattre / Faculty / Henshaw

EVALUATION METHODS

Attendance

Attendance is mandatory for all scheduled sessions.

Requests for any scheduling swaps between students must be made via e-mail by both students to Dr. Delattre at <veronique.f.delattre@uth.tmc.edu> at least 72 hours before the session involved.

Any session not attended and/or satisfactorily completed will need to be remediated. Contact must be made with the session facilitator for instructions on remediation. An additional remediation day is scheduled, and the date may be found on the course schedule in the syllabus. Excused absences must be remediated, and the student will receive points toward the course grade. Unexcused absences must be remediated, but the student will receive no points toward the course grade.

Excused Absences

Excused absences must be requested from and approved by the Office of Student Affairs.

Assisting in Clinic

Students will be assigned to the faculty member supervising a clinical bay. Students are expected to assist and/or observe, under the direction of the faculty, until dismissed for the day by the faculty member. The faculty member will evaluate the freshman's performance and knowledge, and approve (i.e. "swipe") the student's progress note in the EPR.

Clinic Attire

Students are expected to follow the guidelines for UTDB accepted "clinic attire" while assisting or observing in the clinics. Any freshman student not in compliance will be asked to leave the clinic and will not receive credit for that session.

Grading

35%	Mid-term Examination
20%	Clinic Assisting
35%	Final Examination
10%	Quizzes given during sessions

NOTE: The original scores of the written examinations will be recorded. However, if the score is below 70, after remediation and approval of the course director, the student must pass the remake examination in order to receive a grade in the course.