

## **SYLLABUS**

COURSE: DHCT 2101 Pre-Clinical Technique  
SEMESTER: Fall  
CREDIT HOURS: 5.0

REVISED: 2009  
REPRINTED: 2009

COURSE DIRECTOR: Darla McKitrick, RDH, MS

## GOAL

An introduction to the basic theories, principles, and procedures used in dental hygiene practice, with primary emphasis on the techniques of instrumentation used in performing diagnostic, preventive, and therapeutic services. The dental hygiene student will have an opportunity to practice these techniques on student partners in the clinic.

This course provides didactic and clinical experiences, which introduces the student to theoretical and practical aspects related to the practice of dental hygiene. Introduction to such aspects shall provide a foundation from which the student may develop in order to serve the public, as well as the dental hygiene profession.

## OBJECTIVES

### I. OPERATION AND MAINTENANCE OF THE DENTAL UNIT

1. List the objectives for care of environmental surfaces in operatory areas.
2. List the basic components of the dental operatory.
3. Describe the procedure for cleaning the following:
  - 3.1 saliva ejector and screen
  - 3.2 evacuator nozzle
  - 3.3 dental chair and stools
  - 3.4 dental unit and controls
  - 3.5 bracket tray and air/water syringe
  - 3.6 dental lamp
  - 3.7 desk area and sink
4. Describe the maintenance that should be performed before and after the dental hygiene appointment.

### II. PATIENT /OPERATOR POSITIONING

1. Describe the physical changes that occur from repetitive strain injuries (RSI).
2. Define ergonomics, Carpel Tunnel Syndrome and Thoracic Outlet Syndrome.
3. Describe the traditional operator positioning.
4. State the proper working distance between the operator and patient.
5. Describe the procedure for seating and positioning the patient.
6. Discuss the use of a semi-supine patient positioning.
7. Discuss the differences between the traditional and Performance Logic method of determining operator positioning.
8. Identify the correct (traditional) patient and operator positioning for each area of the mouth.
9. Recognize proper dental light positioning for all areas of the mouth.
10. Identify proper bracket tray position for work simplification.

### III. INFECTION CONTROL

1. Define "Standard (formerly Universal) Precautions".
2. Define "Barrier".
3. Discuss indications for the use of facemasks, gloves, and eyeglasses. Describe:
  - 3.1 when and how they are worn

- 3.2 proper care
  - 3.3 proper fit
4. Describe two recommended handwashing procedures and state when each is used.
  5. Describe the maximum precautions and procedures for patients with possible communicable diseases such as; Hepatitis, Tuberculosis, CMV, Epstein Barr Virus, Herpes Virus, and AIDS. Include:
    - 5.1 preparation of the treatment area
    - 5.2 patient preparation
    - 5.3 dental team preparation
    - 5.4 treatment considerations
    - 5.5 post-treatment considerations
  6. Describe the personal hygiene measures required of dental faculty, staff, and students at the Dental Branch regarding:
    - 6.1 long hair
    - 6.2 fingernails
    - 6.3 jewelry
  7. Identify the types of disinfectants used for the cubicle and for soaking instruments at the Dental Branch.
  8. Describe the procedure for cleaning and disinfecting the operatory area prior to patient treatment.
  9. Describe overgloves and state the situations in which they must be worn.  
State the amount of time to purge the water syringe.
  10. State the amount of time the patient must rinse with mouthrinse.
  11. Describe the appropriate clinic attire, which conforms to the infection control policy of the Dental Branch, for the Dental Hygiene Clinic.
  12. Describe current Bloodborne Pathogen Exposure protocol.
  13. Describe the proper use of plastic biohazard bags.
  14. Identify procedures used to enhance one's safety when treating a known high-risk patient.

#### IV. STERILIZATION AND ASEPSIS

1. Define and differentiate among the following terms:
  - 1.1 sterilization
  - 1.2 bioburden
  - 1.3 biofilm
  - 1.4 asepsis
  - 1.5 nosocomial infection
2. Compare and contrast the terms sterilization, decontamination and sanitation.
3. Identify precautionary measures in order to prevent the occurrence of cross-contamination.

4. List the steps in the procedure required for preparation of instruments for sterilization.
5. Describe the following five methods of sterilization. Include their uses, mode of action, operation, advantages and disadvantages:
  - 5.1 steam under-pressure
  - 5.2 dry heat
  - 5.3 chemical vapor pressure
6. Describe the test that indicates if sterilization is actually being accomplished and how often it should be performed.
7. Describe the proper care of sterile instruments. Include transfer and storage methods.
8. Discuss chemical disinfectants/sterilants. Include their uses, mode of action, and operation.
9. List eight properties of an ideal disinfectant.
10. List four recommended chemical disinfectants.
11. Discuss immersion sterilization.

V. ORAL STRUCTURES; MOUTH MIRROR; AIR-WATER SYRINGE; GRASP & FULCRUM

1. Identify normal extraoral, intraoral landmarks, and gingival structures. Identify those that are keratinized and non-keratinized.
2. List the gingival fiber groups and principle fiber groups of the periodontium.
3. Describe and label the three parts of a dental instrument.
4. Describe pen, modified pen and palm grasp.
5. State the importance of a proper modified pen grasp.
6. Identify four uses of a mouth mirror.
7. Describe the three different types of mirror surfaces.
8. Describe ways in which clear mirror vision may be maintained.
9. Identify the technique for proper use of the air-water syringe.
10. Identify the clinical uses for the air-water syringe.
11. Describe the appearance of dried calculus.

VI. EXAMINATION INSTRUMENTS: PERIODONTAL PROBES & EXPLORERS

1. Describe the various markings/measurements on probes.
2. Recognize the clinical uses of the periodontal probe.
3. Recognize and describe proper technique for using the periodontal probe.

4. Discuss why probing is important.
5. Describe how to read the probe.
6. Given various probe recordings, discuss their significance clinically.
7. Define the walking stroke.
8. Identify the six crevice measurements recorded for each tooth when probing.
9. Describe the col area.
10. Compare the terms pocket and crevice (sulcus).
11. List the uses for explorers.
12. Describe the sensory stimuli used in the exploring technique.
13. Describe the proper procedure for using the explorer.
14. Identify the characteristics of the EXD #11/12 and #17 explorers and how they may be used to detect calculus.
15. Describe various explorer designs and their uses.
16. Describe the feeling of calculus and the CEJ when using an explorer.
17. Describe the steps necessary to explore teeth subgingivally.
18. Given each sextant of the mouth, describe proper operator position, patient head position, and mirror use/position.
19. Given a #23 Shepherd's hook explorer, indicate its use and limitations.
20. Given an EXD 11/12 explorer, describe a visual cue for selecting the correct end.
21. Discuss possible causes of tooth surface irregularity.

VII. INSTRUMENTS & INSTRUMENTATION PRINCIPLES

1. Identify the correct patient and operator position for each area of the mouth.
2. Describe a balanced instrument.
3. Differentiate between a complex/modified shank and a simple shank.
4. Name the three ways an instrument may be identified.
5. Identify the variety of blades, shanks, and handles available in instruments and characteristics of each.
6. Compare the design of the instrument blade and shank to its application.
7. Identify proper angles of working end application when exploring or scaling.
8. State the reason for use of a fulcrum when using instruments.

9. Identify the characteristics, purpose, and application of the following instruments: curet, sickle scaler, hoe, chisel and file.
10. Name and locate the surfaces and cutting edges of each instrument; curet, sickle scaler, hoe, chisel and file.
11. List the contraindications for using a sickle scaler.
12. Differentiate between a curved and straight sickle scaler.
13. Identify sickles, curettes, hoes, files, and chisels in a group of mixed instruments.
14. List the characteristics of a well-adapted instrument.
15. Define the term "angulation" in relation to instrument adaptation when scaling.
16. Name four different procedures for which a dental hygienist's instruments are used.
17. Define an instrument stroke; describe the different types and when each would be used.
18. Name the factors that influence the selection and nature of a stroke.
19. Describe and compare an exploratory stroke and a working stroke.
20. Given a list of instruments, the student should be able to recognize:
  - 20.1 the appropriate instrument sequence to be used in a prophylaxis procedure, i.e., first to last in procedure
  - 20.2 the appropriate instrument to remove heavy or fine deposits
  - 20.3 the appropriate instrument to remove subgingival or supragingival deposits
  - 20.4 if the instrument is used on anterior and/or posterior teeth

#### VIII. INFECTIOUS DISEASES

1. Explain the theory of disease transmission and the necessity for aseptic measures in dentistry.
2. Define direct contact transmission, indirect contact transmission, droplet infection, and vehicle as they are related to the transfer of infectious material.
3. Identify three dust-borne microorganisms.
4. Describe recommended aseptic measures that would be carried out before the patient's arrival that contribute to the control of dust-borne pathogens during a dental appointment.
5. Define aerosols.
6. Describe the origin of aerosols and splatter.
7. Describe how aerosols enter and settle in the body.
8. Describe procedures to aid in the reduction of aerosol production.
9. Define incubation period, communicable period, carrier, seroconversion, serum marker, passive immunity and active immunity.

10. Identify the TB vaccine and its characteristics
11. Compare and contrast Hepatitis A, B, C, D, E and G according to the disease or condition and route or mode of transmission.
12. Define a chronic carrier of HBV.
13. Identify methods of acquiring immunity to types of hepatitis.
14. Describe the hepatitis vaccines available.
15. Discuss HCV and its implications.
16. Identify common abbreviation for surface antigen and carrier state related to a HBV blood test and their indications.
17. Describe the disease or condition and the route or mode of transmission of influenza viruses, mycobacterium tuberculosis, measles virus, rubella virus, mumps virus, and neisseria gonorrhoea, treponema pallidum, CMV, and Epstein-Barr virus.
18. Describe the different types of herpetic infections.
19. Define prodrome.
20. Describe herpetic whitlow and ocular keratitis.
21. Describe the information that should be explained to patients about herpetic lesions and the scheduling of their dental appointments.
22. Define HIV and AIDS.
23. Identify the route or mode of transmission of HIV.
24. Describe the significance of a head and neck examination related to AIDS.
25. Describe oral findings that have been identified as characteristic of HIV infection.
26. Discuss the importance of CD4 counts for the HIV patient.

IX. MEDICAL AND DENTAL HISTORIES

1. Describe the role of the dental hygienist with respect to the ethical and legal responsibilities involved in preliminary oral diagnosis.
2. Define bacteremia.
3. Define subjective and objective symptoms.
4. Compare and contrast the history questionnaire and the history interview based on each methods advantages and disadvantages.
5. Take and record a medical/dental history using a personal interview technique.
6. State the purposes of the patient's:

- 6.1 family history
  - 6.2 personal history
  - 6.3 dental history
  - 6.4 medical history
7. State the importance of the review of the organ systems.
  8. Identify and evaluate conditions and/or responses that would indicate:
    - 8.1 special appointment planning and scheduling
    - 8.2 necessary prophylactic antibiotic regimens
    - 8.3 special precautions to prevent allergic reactions to substances and/or drugs commonly utilized in dental procedures
    - 8.4 special precautions to prevent disease transmission.
  9. State the dosage for prophylactic antibiotic premedication for both the adult and child patient recommended by the American Medical Association and the American Heart Association. Also state the recommended regimen for a patient allergic to penicillin.
  10. Describe the health history conditions that would:
    - 10.1 necessitate consultation with the dentist/physician for medical clearance
    - 10.2 dictate a patient unacceptable for treatment in the dental hygiene clinic
  11. Given a situation, write a medical clearance for a patient with high blood pressure.
  12. Describe the use of the Physician's Desk Reference (PDR).
  13. Describe the use of the Merck Manual.
- X. AREA SPECIFIC CURETS
1. Recognize the purpose of the Gracey curets.
  2. Identify the uses of the Gracey curets numbers 1 /2, 3 /4, 5/6, 7/8, 9/10, 11/12, 13/14, 15/16, 17/18.
  3. Recognize the design characteristics of the Gracey curets.
  4. Discuss the use of the rigid Gracey curets.
  5. Recognize the proper procedures for use.
  6. Describe how to determine the functional cutting edge of any given Gracey curet.
- XI. NONSURGICAL PERIODONTAL THERAPY & PERIODONTAL DEBRIDEMENT
1. Define the scope of non-surgical periodontal therapy and debridement.
  2. Define scaling and root planing in terms of what is removed and why it is removed for each procedure and differentiate between the two.
  3. Explain the rationale for removing calculus.
  4. Recognize and discuss the expected outcomes of non-surgical periodontal therapy.
  5. Describe treatment planning methods which would promote effective and efficient scaling.

6. Describe attached and unattached plaque and their significance.
7. Define deplaquing and debridement.
8. Describe how a deposit of calculus is fractured from a tooth surface and differentiate that from a "shaving" process.
9. Discuss the potential problems of incomplete scaling.
10. Identify methods of recognizing/detecting supra and subgingival calculus.
11. Describe how to recognize the depth of the crevice.
12. Explain the rationale for systematic approach to calculus removal.
13. Identify the factors that make submarginal scaling a more complicated procedure than supramarginal scaling.
14. Describe the instrumentation procedure when removing supra and subgingival calculus.
15. Describe a working (scaling) stroke.
16. Discuss causes of trauma to tooth and soft tissue during calculus removal and describe how to avoid such injury.
17. State the indications for the inclusion of root planing in a treatment plan.
18. Describe the technique used for root planing.
19. State the procedure for dealing with a broken instrument during operative procedure.
20. Identify the order of instrumentation for curets and sickles.
21. Given any scaling instrument, identify all areas where it may be used in the dentition.
22. Identify the steps of activation for supramarginal deposit removal.
23. Describe the relationship of the shank to the tooth for a vertical stroke.
24. Describe the role of the exploratory stroke as it relates to scaling instruments.
25. Describe the pressure of the instrument that should be applied in scaling.
26. State the functions of the explorer, probe, and compressed air during scaling procedures.

## XII. EXTRA/INTRA ORAL EXAMINATION

1. Describe the responsibility of the dental hygienist in preliminary oral diagnosis.
2. State the rationale for performing a thorough extraoral and intraoral examination on all patients.
3. Identify and discuss characteristics to observe in assessing a patient's general, physical appearance and how they might affect treatment.

4. State the purpose of a systematic sequence of examination.
5. Define the following terms: palpation (bimanual, bidigital), auscultation (crepitus), percussion.
6. Describe the extraoral and intraoral examination including:
  - 6.1 the correct positions of the patient, dental chair, and operator during examination
  - 6.2 armamentarium needed during examination.
  - 6.3 the names of all structures to be visually inspected and palpated
  - 6.4 normal landmarks associated with the above structures
  - 6.5 types of palpation used for each structure
  - 6.6 common abnormalities that may be detected in each area
  - 6.7 information that should be included in a description of an oral lesion or deviation from normal
  - 6.8 descriptions of common lesions such as nodules, ulcers, macules etc.
7. List and demonstrate the steps for a thorough examination according to the dental hygiene handbook.
8. Identify the major lymph nodes into which the vessels of the facial and oral regions drain.
9. List the most common sites of occurrence for oral cancer.
10. Describe the signs and symptoms of oral cancer.
11. Identify the predisposing factors that contribute to the risk of oral cancer and patients who are "at risk".
12. State the oral signs of pediatric and geriatric abuse.
13. Describe the general signs of a patient addicted to drugs.
14. State two appointment factors to be considered for drug addicts and the rationale.

### XIII. TEETH AND OCCLUSION

1. Recognize and describe Angle's classification of malocclusion (both molar and canine relationships) and facial profiles.
2. Recognize and describe the various malrelations of groups of teeth including:
  - 2.1 crossbite
  - 2.2 edge-to-edge
  - 2.3 end-to-end
  - 2.4 openbite
  - 2.5 overjet
  - 2.6 underjet
  - 2.7 overbite
3. Describe and recognize the various malrelations of individual teeth including:
  - 3.1 labioversion (facioversion)
  - 3.2 linguoversion
  - 3.3 buccoversion
  - 3.4 supraversion (extrusion)

- 3.5 torsiversion
- 3.6 infraversion (intrusion)

- 4. Recognize the proper method for determining occlusion.
- 5. Define the term "tendency" as it relates to occlusion.
- 6. Recognize how to determine occlusion in a primary dentition.
- 7. Identify and define enamel hypoplasia, hypocalcification and decalcification and describe how to differentiate among them.

XIV. HARD TISSUE EXAMINATION

- 1. List or identify four purposes for charting.
- 2. Define dental caries.
- 3. Identify or describe the role of plaque in dental caries.
- 4. List or describe the three elements necessary for dental caries to occur.
- 5. List or identify the microorganisms responsible for smooth surface caries and root caries.
- 6. Identify or describe the role of orally fermentable carbohydrates in the formation of caries.
- 7. Identify or describe enamel and root caries and the differences between them.
- 8. Explain why charting procedures are an integral part of dental hygiene procedures.
- 9. Identify the permanent teeth using the numbering system, 1-32, and relate this numbering system to the proper names of the teeth.
- 10. Identify the primary teeth using the letter system, A-T, and relate this letter system to the proper names of the teeth.
- 11. Identify the armamentarium for a charting procedure.
- 12. Recognize what must be reviewed when performing a complete examination of the dentition.
- 13. Define attrition, abrasion, erosion and facets and describe the appearance of each.
- 14. Recognize the meaning of the following terms:
  - 14.1 primary, incipient, and initial caries
  - 14.2 recurrent and secondary caries (marginal breakdown)
  - 14.3 rampant caries
  - 14.4 arrested caries
  - 14.5 early childhood caries
  - 14.6 frank lesions, suspicious caries
  - 14.7 borderline lesions, watch caries
- 15. Identify or describe G.V. Black's classification of caries and restorations.
- 16. Identify or describe ways to detect dental caries using visual, tactile, radiographic, and transillumination techniques.

17. List the key variables included in preparation of a mixed dentition charting, reviewing eruption dates and the similarity between first permanent molars and second primary molars.
18. Demonstrate accurate techniques for detecting dental caries.
19. Using the EPR and a charting form, chart the various characteristics given on a sample patient.

XV. PERIODONTAL CHARTING

1. Describe the significance of the following factors to periodontal disease:
  - 1.1 pocket depths
  - 1.2 gingival recession
2. State items to be charted on a periodontal chart.
3. Perform an effective periodontal probe evaluation in terms of adaptation, angulation of the tip, amount of pressure needed, and number and location of probe readings on each tooth.

XVI. VITAL SIGNS

1. Identify the following related to temperature:
  - 1.1 proper technique to be used in obtaining temperature
  - 1.2 three methods of temperature measurement
  - 1.3 two causes of fever
  - 1.4 three causes of subnormal body temperature
2. Identify the following related to the pulse:
  - 2.1 three factors to be evaluated while monitoring pulse
  - 2.2 proper technique to be used in taking pulse
  - 2.3 two arteries routinely used in taking pulse
  - 2.4 techniques for locating the carotid artery
  - 2.5 normal resting heart rates
3. Identify the following related to respiration:
  - 3.1 proper technique to be used in determining respiratory rate
  - 3.2 normal respiratory rates
4. Identify the following related to blood pressure:
  - 4.1 proper technique to be used in taking blood pressure.
  - 4.2 two types of manometers and the advantages and disadvantages of each
  - 4.3 sounds of Korotkoff
  - 4.4 significance of auscultatory gap and how to avoid missing it
5. Explain and demonstrate how to correctly take vital signs.

XVII. DRUG INDUCED ORAL MANIFESTATIONS

1. Describe Xerostomia, its causes, symptoms and suggested treatment.

2. Define candidiasis:
  - 2.1 Describe the appearance of the lesion
  - 2.3 State drugs associated with the cause
  - 2.4 State 2 drugs used at treatment.
  
3. Describe Erythema Multiforme minor:
  - 3.1 Describe the appearance of the lesion
  - 3.2 State the best documented systemic drugs that are associated with it
  - 3.3 List two types of treatment
  
4. Describe the Lichenoid Drug Reaction:
  - 4.1 List two systemic drugs associated with it
  - 4.2 Identify the treatment
  
5. State the mechanism for gingival enlargement and 3 categories of drugs associated with gingival hyperplasia and treatment.
  
6. Describe Dysgeusia and the role of saliva.
  
7. Describe tetracycline and minocycline staining.
  
8. Describe hairy tongue and identify:
  - 8.1 predisposing factors
  - 8.2 treatment
  
9. Describe angioedema and identify:
  - 9.1 Associated drugs
  - 9.2 Treatment

#### XVIII. COSMETIC AND THERAPEUTIC POLISHING

1. Identify common stains found on the teeth, including the:
  - 1.1 name
  - 1.2 clinical appearance
  - 1.3 etiology
  - 1.4 classification (intrinsic, extrinsic, endogenous, exogenous)
  - 1.5 method of removal
  
2. Identify the objectives for polishing as part of the oral prophylaxis.
  
3. State the effects of polishing.
  
4. State the indications and contraindications for polishing.
  
5. State the rationale for selective polishing.
  
6. List and explain the principles of abrasion.
  
7. Identify the characteristics of abrasive particles and how each affects the abrasivity of an agent.
  
8. Define frictional heat and its effects on tooth structure and epithelium.

9. List and explain the indications, contra-indications associated with various polishing agents such as; exposed root surfaces, presence of gold, and/or composite, etc.
10. Describe the types of polishing pastes available and state the indications for the use of each.
11. List 3 enhanced additives to polishing pastes and their functions.
12. Describe the methods of removing soft deposits and extrinsic stain.
13. Describe the type of motor speed that should be utilized during rotary instrument polishing.
14. State the uses of the rubber cup and brushes.
15. Describe the techniques for polishing proximal surfaces.
16. Describe the complete sequence to be followed in polishing with a low speed hand piece.
17. Explain the rationale for always following the same sequence when polishing the teeth.
18. Identify methods for evaluating the thoroughness of polishing procedure.

XIX. CLINIC INFORMATION

1. State the ADA code and cost for:
  - 1.1 case complete
  - 1.2 recall case complete
  - 1.3 periodic exam
  - 1.4 comprehensive exam
  - 1.5 FMS, 2 BW, 4 BW, Panoramic
  - 1.6 prophylaxis – adult (w/o fluoride)
  - 1.7 prophylaxis – child (w/o fluoride)
  - 1.8 topical application of fluoride – child (w/o prophylaxis)
  - 1.9 topical application of fluoride – adult (w/o prophylaxis)
  - 1.10 oral hygiene instructions
  - 1.11 scaling/root planing (SRP) 1-3 teeth
  - 1.12 scaling/root planing (SRP) 4 + teeth
  - 1.13 periodontal maintenance
2. State the order of appointment sequence.
3. State the point in the appointment sequence when instructor checks are necessary.

## RESOURCES

### I. Media Resources

#### A. Printed Media

1. Required Readings:  
textbook(s), pamphlet(s) and journal(s)

Wilkins, Esther 10<sup>th</sup> ed  
*Clinical Practice of the Dental Hygienist*  
Lippincott, Williams and Wilkins, 2009  
Available at DB Bookstore, Room 8

Daniel, Susan J. & Harfst, Sherry A. 2<sup>nd</sup> ed  
*Mosby's Dental Hygiene*  
Mosby Inc., 2008  
Available at DB Bookstore, Room 8

Nield-Gehrig, Jill S. 6<sup>th</sup> Edition  
*Fundamentals of Periodontal Instrumentation*  
Lippincott, Williams and Wilkins, 2008  
Available at DB Bookstore, Room 8

*Dental Hygiene Student Handbook*  
The School of Dental Hygiene, Houston: UTHSC, 2009-2010  
Available on CD Rom

*Preclinical Technique Lecture/Handout Packet* 2009-2010  
Available at DB Bookstore, Room 8

Dental Branch Clinic Manual  
Available online at <http://www.db.uth.tmc.edu/clinic-pat/patientcare/home.htm>

Wynn, Meiller & Crossley *Drug Information Handbook for Dentistry* 15th edition  
Lexi-Comp Inc.  
Hudson, OH  
Available at DB Bookstore, Room 8

*Mosby's Dental Dictionary* Latest edition  
Mosby Year Book, Inc., 2007  
Available at DB Bookstore, Room 8

*Healthcare Provider's Manual for Basic Life Support for Course C*  
American Heart Association, Latest edition  
Available at DB Bookstore, Room 8

B. Non-printed Media

1. Videotape

<i>The Periodontal Probe</i>	#508
<i>Head and Neck Exam</i>	#514
<i>The Explorer</i>	#515
<i>The Straight Sickle</i>	#510
<i>The Posterior Curet (Universal)</i>	#513
<i>The Anterior Curet</i>	#511
<i>The Posterior Sickle</i>	#516

II. Human Resources

Darla McKittrick, RDH, MS  
Associate Professor  
Phone 500-4397: Room 1.085E  
Email: [Darla.McKittrick@uth.tmc.edu](mailto:Darla.McKittrick@uth.tmc.edu)

III. Other Resources

*The Merck Manual of Diagnosis and Therapy*, 18<sup>th</sup> ed  
Berkow, Robert, Merck, Sharp and Dohme, NY  
<http://www.merckservices.com/portal/site/merckservices/>

*Taber's Cyclopedic Medical Dictionary*

*Physician's Desk Reference*

*Drug Information (Clinical Pharmacology)* <http://www.db.uth.tmc.edu/clinic-pat/patientcare/pcguidelines.htm>

*Common Oral Lesions* <http://www.db.uth.tmc.edu/clinic-pat/patientcare/home.htm>

*Medical Information* [Medical Information](#) (WebMD)

## STUDY PLAN AND REQUIREMENTS

- I. Attendance and Punctuality
  - A. Absence from any portion of a period is recorded as a full absence. Please plan elective medical/dental appointments when classes are not scheduled.
  - B. Attendance is MANDATORY in Preclinic. Please refer to *the School of Dental hygiene Student Handbook* for policies.
  - C. Emergency problems must be reported immediately to the program secretary by calling 713-500-4086.
  - D. If for any reason you are unable to attend class, contact the course instructor or program secretary as soon as possible before your absence.
  - E. The student is responsible for obtaining information, materials, and/or assignments that were presented during the class session missed.
  - F. Absences will affect your grade earned in this course (refer to the *School of Dental Hygiene Student Handbook*).
  
- II. Reading Assignments
  - A. Complete assignments prior to lecture dates.
  - B. Additional materials for required reading may be distributed at each class.
  
- III. Academic Success
  - A. The student is encouraged to review his/her course status regularly.
  - B. If a below average score is earned in any portion of the course, the student must contact the course instructor for assistance in planning for successful completion of the course.
  
- IV. Use and Care of Equipment/Facilities
  - A. Total responsibility for instruments and loan items from the Dental Branch rests with the student. Any of these items that are lost, misplaced, broken, or extinguished must be replaced immediately by the student at the student's expense.

**DHCT 2101 PRE-CLINICAL TECHNIQUE  
Lecture Schedule Fall 2009**

Please note that this schedule is subject to change.  
Lectures are on **Monday (Room 446), 10-11:30 am** and  
**Thursday (Room B81), 1-2:30 pm**, with exceptions  
Videos may be viewed in BlackBoard or the LRC, Room 341.

Date	Lecture Topic	Assignment
Aug 17	Review syllabus and DH Handbook	DH Handbook: Sec A
<b>Aug 17 1-4:00 pm</b>	Unit Operation and Maintenance <b>Room 446</b> Patient Operator Positioning; Infection Control	Daniel & Harfst: Ch 8 Nield-Gehring: pp. 11-27 DH Handbook: Section C pp. 30-3
Aug 20	Dental Branch Clinic Manual <b>Room B81</b> Dr. O'Neill, presenter <b>Bring to class:</b> Sec 2 –Safety and Infection Control	Wilkins: Ch. 3
Aug 24	Infection Control	DB Clinic Manual Section 2
<b>Aug 24 1-4:00 pm</b>	Sterilization and Asepsis <b>Room 446</b> <b>Bring to class:</b> Sec 2 –Safety and Infection Control	Wilkins: Ch 4; Daniel & Harfst: pp. 105-110 DH Handbook: C p. 69
Aug 27	Oral Structures Grasp and Fulcrum Mouth Mirror A/W Syringe <b>Bring one mouth mirror to class.</b>	Wilkins: pp. 609-12, 617-21, 625-8, 212-9, 228-31; Daniel & Harfst: pp. 308-13, color photos pp. 296-304; Nield-Gehring: Modules 3; pp. 65-76
Aug 31	Examination instruments	Wilkins: pp. 232-37, 240-44 Nield-Gehring: Module 9, 11; pp. 203-4, 243-50, 254-68 Video #508 Probe and #515 Explorer
Sep 3	Instruments and Instrumentation Principles <b>Bring EXD 11/12, pencil and Nield-Gehring text to class</b>	Wilkins: pp. 612-7, 621-6 Daniel & Harfst: pp. 178, Tables 9-1 & 9-2 Nield-Gehring: Module 7, pp. 307- 20, 285-90, 295-304
<b>Fri, Sep 4 10-11:30 am</b>	Instruments and Instrumentation Principles Quiz #1 <b>Room B81</b>	
<i>Sep 7</i>	<i>Labor Day Holiday</i>	
Sep 10	Instrumentation Principles <b>Bring dental model, SBH 5/6, S204S, and red nail polish to class</b>	Nield-Gehring: Modules 8; pp. 199-206, 209-16, 381-2 Video #513 Posterior Curet Video #516 Posterior Sickle
Sep 14	<b>EXAM I</b> <b>Room 340</b>	
Sep 17	Infectious diseases	Wilkins: Ch 2 <a href="http://www.cdc.gov/default.htm">http://www.cdc.gov/default.htm</a>
Sep 21	Infectious diseases <b>Bring Daniel &amp; Harfst text to class</b>	Daniel & Harfst: pp. 110-121

Date	Lecture Topic	Assignment
Sep 24	Medical/Dental History <b>Bring DH Handbook to class</b>	Wilkins: Ch 7 Daniel & Harfst: Ch 12 DB website Clinical Info: EPR <i>Overview</i> training video
Sep 28	Medical/Dental History <b>Bring DH Handbook to class</b> <b>Simulation Center 1.084</b>	DH Handbook: C pp. 34-44
Oct 1	Area Specific Curets Quiz #2 <b>Bring SRPG 15/16, SG 17/18, SAS1/2, dental model to class</b>	Nield-Gehring: pp. 207-8, 333-42, 347-52; 354
Oct 5	<b>EXAM II</b> <b>Simulation Center 1.084</b>	
Oct 8 <b>1-4:00 pm</b>	<i>No lecture</i> Clinic observation	
<b>Fri, Oct. 9</b> <b>10-11:30 am</b>	Non-surgical Perio Therapy <b>Room 446</b> Periodontal Debridement <b>Bring EXD 11/12 and gloves to class</b>	Wilkins: pp. 353-5, 641-55, 669; Nield-Gehring: pp. 275-80; pp. 375-85
Oct 12	Extra/Intra Oral Examination Patient Assessment	Daniel & Harfst: Ch 15; Wilkins: pp.181-87; <a href="http://www.db.uth.tmc.edu/clinic-pat/Documents/commonorallesions05.ppt">http://www.db.uth.tmc.edu/clinic-pat/Documents/commonorallesions05.ppt</a>
Oct 15	Extra/Intra Oral Examination	Daniel & Harfst: pp. 277-87; Wilkins: pp. 190-3 Video #514 Head & Neck Exam
Oct 19	Teeth and Occlusion	Wilkins: pp. 270-2, Ch 16
Oct 22	Hard Tissue Examination	Daniel & Harfst: Ch 17; Wilkins: Ch 6 DB website Clinical Info: EPR <i>Charting</i> training video
Oct 26	Hard Tissue Examination Quiz #3 <b>Simulation Center 1.084</b>	DH Handbook C pp.47-52
Oct 29	Periodontal Charting & Anterior Instruments	DH Handbook: C p.48 Nield-Gehring: pp.77-102, 251-3, 291-4, 343-6 Video #510 Straight Sickle Video #511 Anterior Curet
Nov 2	<b>EXAM III</b> <b>Room 207</b>	
Nov 5 <b>1-4:00 pm</b>	<i>No lecture</i> Clinic Observation	
Nov 9	Vital Signs Ms. Adkisson, presenter	Wilkins: Ch. 8 Handouts
Nov 12	Drug Induced Oral Manifestations <b>Bring Daniel &amp; Harfst text to class</b>	Daniel & Harfst: Ch 13
<b>Fri, Nov. 13</b> <b>11-11:50 am</b>	Cosmetic and Therapeutic Polishing <b>Room B81</b>	Wilkins: pp. 725-35 Daniel & Harfst: pp. 599-613 Nield-Gehring: 603-4, 608-10

<b>Date</b>	<b>Lecture Topic</b>	<b>Assignment</b>
Nov 16	Cosmetic and Therapeutic Polishing	
Nov 19	HIPAA Information	Dental Branch Clinic Manual Sec. 3.20-3.57 DH Handbook: C pp. 54-5
Nov 23	Clinic Information & Dental Records Quiz #4 <b>Simulation Center 1.084</b>	
<i>Nov 26-27</i>	<i>Thanksgiving Day Holidays</i>	
Nov 30	Clinic Information	
Dec 3	Review for Final Exam	
<b>Dec 7 9-11:00 am</b>	<b>COMPREHENSIVE FINAL EXAM Room 132</b>	

**DHCT 2101 PRE-CLINICAL TECHNIQUE  
Laboratory Schedule Fall 2009**

Note that this laboratory schedule is subject to change.  
All labs will meet in the DH Clinic Bays F and G from **1-4:30 pm**  
on **Monday and Wednesday** except when otherwise noted.

<b>Date</b>	<b>Procedure</b>	<b>Activities</b>
Aug 17	Review syllabus <span style="float: right;"><b>Room 446</b></span>	
Aug 19	Check Instruments; Unit Operation Patient/Operator Positioning	
Aug 24	Infection Control <span style="float: right;"><b>Room 446</b></span>	
Aug 26	Sterilization and Asepsis	<b>Bring 2 each: EXD 11/12, PCP 12, Mouth mirror, napkin chain, 2 cassettes</b>
Aug 31	Mouth Mirror Air-Water Syringe Oral Topography	
Sep 2	Explorer/Probe <span style="float: right;"><b>Simulation Center</b></span>	
Sep 7	<i>Labor Day Holiday</i>	
Sep 9	Practice Lab Add to each cassette (should have 2): <i>Barnhart SBH 5/6 9, S204S 9, R138 Montana Jack</i>	Practice on partner
Sep 14	Universal Curet and Posterior Sickle <span style="float: right;"><b>Simulation Center 1.084</b></span>	
Sep 16	Universal Curet and Posterior Sickle	Practice on partner
Sep 21	Practice Lab Add to each cassette: <i>SRPG 15/16 9, SRG 17/18 9, EXD 5 8</i>	
Sep 23	Skill Evaluation Group 1: Aquilera - N. Le	<b>Skill Evaluation #1</b> Probe, SBH 5/6, S204S
Sep 28	Skill Evaluation Group 2: K. Le - Zamani	<b>Skill Evaluation #1</b> Probe, SBH 5/6, S204S
Sep 30	Medical/Dental History	Medical/Dental History on partner <b>Bring Drug Information &amp; DH Handbook to lab</b> DB website Clinical Info: EPR <i>Overview</i> training video
Oct 5	Mid-semester conferences	Students meet with assigned advisor
Oct 7	Remediation Lab by invitation only	
<b>Fri. Oct 9 1:30-5:30 pm</b>	CPR (1/3 of the class) <span style="float: right;"><b>Room 3.077</b></span>	CPR for only those signed-up for this day

Date	Procedure	Activities
Oct 12	Posterior Gracey Curets <b>Simulation Center 1.084</b>	
Oct 14	Gracey Practice Lab Add to each cassette: SN 137, SAS 1/2 4	
<b>Fri. Oct 16</b> <b>1:30-5:30 pm</b>	CPR (1/3 of the class) <b>Room 3.077</b>	CPR for only those signed-up for this day
Oct 19	Extra/Intra Oral Examination Occlusion Bass Tooth brushing <b>Simulation Center 1.084 then DH Clinic</b>	Extra/Intra Oral Examination Occlusion Bass Tooth brushing (partner #1) <b>(Set up cubicle)</b>
Oct 21	Skill Evaluation - All students	<b>Skill Evaluation #2</b> SRPG 15/16, SRG 17/18
Oct 26	Extra/Intra Oral Examination Occlusion Bass Tooth brushing	Extra/Intra Oral Examination Occlusion Bass Tooth brushing (partner #2)
Oct 28	Dental Charting	Dental Charting <b>Non-instrument Skill Evaluations</b> DB website Clinical Info: EPR <i>Charting</i> training video
<b>Fri. Oct 30</b> <b>1:30- 5:30 pm</b>	CPR (1/3 of the class) <b>Room 3.077</b>	CPR for only those signed-up for this day
Nov 2	Anterior instruments <b>Simulation Center 1.084</b>	Max and mand
Nov 4	Practice Lab	Anterior instruments
Nov 9	Vital Signs ½ class <b>Room B81</b>	Lab for only those signed-up for this day
Nov 11	Skill Evaluation Group 2: K. Le - Zamani	<b>Skill Evaluation #3</b> SN 137, SAS 1/2, EXD 11/12
<b>Fri. Nov 13</b> <b>1-4:00 pm</b>	Vital Signs ½ class <b>Room B81</b>	Lab for only those signed-up for this day
Nov 16	Skill Evaluation Group 1: Aquilera - N. Le	<b>Skill Evaluation #3</b> SN 137, SAS 1/2, EXD 11/12
Nov 18	Polishing, Flossing, and Fluoride <b>Simulation Center 1.084 then DH Clinic</b>	Polishing, Flossing, and Fluoride (partner #1 Set up cubicle)
Nov 23	Polishing, Flossing, and Fluoride	Polishing, Flossing, and Fluoride (partner #2 Set up cubicle)
Nov 25	<i>No lab</i>	
Nov 26-27	<i>Thanksgiving Day Holiday</i>	
Nov 30	Instrument Practice Lab	
Dec 2	<b>Instrument Identification Exam</b>	Second Attempt Skill Evaluations

## EVALUATION METHODS

### I. GRADE POSSIBLE

A, B, C, or F

### II. GRADE REQUIREMENTS

A = 93 - 100% average on lecture material and completion of all laboratory evaluations by the end of the semester.

B = 84 - 92% average on lecture material and completion of all laboratory evaluations by the end of the semester.

C = 75 - 83% average on lecture material and completion of all laboratory evaluations by the end of the semester.

F = 74% and below on lecture material.

### III. OVERALL REQUIREMENTS:

A. The course grade will consist of:

Exam I	20%
Exam II	20%
Exam III	20%
Quizzes	10%

Comprehensive Final Exam	30%
Homework and Assignments	P/F
Lab Blogs (5 entries)	P/F

Interactive CD-ROM Exercise P/F due no later than December 3

Total	<u>100%</u>
-------	-------------

1. If an examination is missed, a conference appointment **MUST** be made with the course instructor, as soon as possible after the absence. A make-up examination will be scheduled at the end of the semester during final exam week.
2. Any student receiving less than 75% on any exam must make a conference appointment with the instructor.
3. **All exams must average 75% to pass this course.**
4. It is the responsibility of the student to review his/her progress with the instructor **IMMEDIATELY**, when there is any question, to resolve any doubt of passing or failing for any area of performance.
5. All P/F requirements must be completed by December 3 to achieve a letter grade of "A" for this course.

- B. The lab portion will not count towards the course grade. All Skill Demonstrations must be completed at a Satisfactory or Improvable level in order to pass the course. The lab portion will consist of 6 process and 8 instrument evaluations to include:

<b>Process Skill Evaluations</b>	<b>Instrument Skill Evaluations</b>
Oral Topography	PCP 12 probe
Medical/Dental History	Barnhart 5/6
Head & Neck Exam	204S
Dental Charting	Gracey 15/16 & 17/18
Polishing	SN137
Fluoride Treatment	Gracey 1 / 2
	EXD 11/12

Evaluation of Skill Demonstrations will be recorded by the instructor. Instrument Skill Evaluations will be attempted on assigned dates. If the evaluation is not satisfactory a second attempt is permitted. If, after the second attempt a “Satisfactory” or “Improvable” is not achieved, a failing grade for the lab portion will be given. **The lab portion of the course must be passed at a “Satisfactory” or “Improvable” level in order to pass the course.**

Evaluation Performance Levels are defined as:

Satisfactory = during this observation, your performance of the procedure is at an expected level in judgment and skill. (Errors allowed will correspond to the difficulty of the skill.)

Improvable = during this observation, your performance of the procedure needs minor adjustments in judgment and skill. (Errors allowed will correspond to the difficulty of the skill.)

Unacceptable = during this observation, your performance of the procedure is below an expected level in judgment and/or skill. (Both critical errors and/or several non-critical errors occur at this level of performance.) This evaluation indicates that you need more practice in order to become competent in performing this procedure.

- C. The **Lab Blogs** are an attempt to make you reflect on your performance in lab. You are to make blog entries in BlackBoard to document your thoughts about what you have learned. Classmates will be able to view your comments as well. Submit each entry with your **last name and blog number (e.g. K. Smith, Blog #1)**. Answer the guided questions in the *Document* section of Blackboard. Write a paragraph or two. Submit each entry **by Friday** of the week the topic is presented. Be succinct and respond in complete sentences.

**You submit 5 Lab Blog entries.** The following labs will qualify for entries:

Sterilization and Asepsis	Extra/Intra Oral Examination
MM, AW Syringe, Oral Topography	Dental Charting
Explorer/Probe	Anterior Instruments
Universal Curets/Sickle	Polish, Floss, Fluoride
Posterior Gracey Curets	Practice Labs
Medical/Dental History	Vital Signs

**Blog entries are to be completed only when you are the student clinician, not the patient.**

## Important Information

1. An instrument identification exam will be given the last lab session of the semester. It is a pass/fail test on which 75% or higher must be earned. This grade does not figure into the course grade.
2. ATTENDANCE IN PRECLINICAL LABORATORY IS MANDATORY to achieve a satisfactory grade. Non-attendance jeopardizes the student's success and the student's laboratory partner's success in this course.
3. Each student must satisfactorily complete each laboratory activity to pass the course.
4. A satisfactory level of preclinical competence must be demonstrated before the student will be permitted to treat clinical patients.
5. Each student must view the videotapes and training videos assigned throughout the course.
6. A student will participate in extra learning labs if the need for additional work is identified.
7. A passing grade in DHCT 2101 / DHBS 3101 Preclinical Technique is a prerequisite to DHCT 2201 / DHBS 3201 Clinical Practice I.
8. **A CPR card must be presented upon successful completion of a Health Care Providers CPR course given by either the American Heart Association or the Red Cross. CPR is required of all students prior to treating patients in the Dental Branch clinics.**