# Lamar Institute of Technology Dental Hygiene Program

**DHYG 1431** 

Course Syllabus Fall 2018

Taught by: Lori A. Rogers, RDH, BS <u>larogers@lit.edu</u>



# Pre-Clinical Dental Hygien

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# Laboratory Schedule

Date	Laboratory	Topic	Assignment
	Lab 1	Introduction to equipment, Handwashing Pre and Post appointment procedures Use of the simulation manikin  Lab Manual pgs. 8 -11 Wilkins: Ch. 5-6	
	Lab 1	Introduction to equipment, Handwashing Pre and Post appointment procedures Use of the simulation manikin	Lab Manual pgs. 8 -11 Wilkins: Ch. 5-6
	Lab 2	Principles of Positioning Cumulative Trauma injuries Instrument Grasp Mathematical principles and anatomic descriptors	Lab Manual pg. 12 FPI Modules 1,2,3 Online @thePoint 1B
	Lab 2	Principles of Positioning Cumulative Trauma injuries Instrument Grasp Mathematical principles and anatomic descriptors	Lab Manual pg. 12 FPI Modules 1,2,3 Online @thePoint 1B
	Labor Day		
	Lab 3	Instrument recirculation Using the mirror Mirror and finger rests – anterior	Lab Manual pg. 13 Wilkins: Ch-6 FPI Module 4,5 Video-Intro to mirror use

Date	Laboratory	Topic	Assignment
	Lab 3	Instrument recirculation Using the mirror Mirror and finger rests in the anterior sextants	Lab Manual pg. 13 Wilkins: Ch-6 FPI Module 4,5 Video-Intro to mirror use
	Lab 4	Mirror/finger rests: Mandibular posterior Maxillary posterior Emergency equipment Location of supplies Sterilization duty	Lab Manual pg. 14 FPI Modules 6,7
	Lab 4	Mirror/finger rests: Mandibular posterior Maxillary posterior Emergency equipment Location of supplies Sterilization duty	Lab Manual pg. 14 FPI Modules 6,7
	Lab 5	Instrument Design and Classification, Movement and Orientation, Adaptation	Lab manual pg. 15 FPI Modules 8,9,10 Video Module 9,10
	Lab 5	Instrument Design and Classification, Movement and Orientation, Adaptation	Lab manual pg. 15 FPI Modules 8,9,10 Video Module 9,10
	Lab 6	Instrumentation strokes EXD11/12A7(explorer)	Lab Manual pg. 16 FPI Modules 11 and 13 Video Modules 11 and 13
	Lab 6	Instrumentation strokes EXD11/12A7(explorer)	Lab Manual pg. 16 FPI Modules 11 and 13 Video Modules 11 and 13

Date	Laboratory	Topic	Assignment
	Lab 7	Health Histories 11/12 explorer	Lab Manual pg. 17 PAT Modules 1-6 ,FPI
	Lab 7	Health Histories 11/12 explorer	Lab Manual pg. 17 PAT Modules 1-6 ,FPI
	Lab 8	Vital Signs Sickle Scalers	Lab Manual pg. 18 PAT Modules 7-9 FPI Module 14 ,15 Video 14,15
	Lab 8	Vital Signs Sickle Scalers	Lab Manual pg. 18 PAT Modules 7-9 FPI Module 14,15 Video 14,15
	Lab 9	Universal Curets	Lab Manual pg. 19 FPI Module 16,17
			Video
	Lab 9	Universal Curets	Lab Manual pg. 19 FPI Module 16,17 Video
	Lab 10	Introduce Area Specific Curets Work on skill evals	Lab Manual pg. 20 FPI Module 19 ( pgs. 451- 455 only)
	Lab 10	Introduce Area Specific Curets Work on skill evals	Lab Manual pg. 20 FPI Module 19 ( pgs. 451- 455 only)
	Lab 11	Intraoral use of the Probe	Lab Manual pg. 21 FPI Module 12 Video
	Lab 11	Intraoral use of the Probe	Lab Manual pg. 21 FPI Module 12 Video
	Lab 12	Head and neck exam Intraoral practice with the 11/12 explorer and the probe	Lab Manual pg. 22 FPI Modules 12-13 PAT Modules 11-12 Video

Date	Laboratory	Topic	Assignment
	Lab 12	Head and neck exam Intraoral practice with the 11/12 explorer and the probe	Lab Manual pg. 22 FPI Modules 12-13 PAT Modules 11-12 Video
	Lab 13	Midterm Lab Practical Exam Pre & Post Op Procedures Competency	Lab Manual pg. 23
	Lab 13	Midterm Lab Practical Exam Pre & Post Op Procedures Competency	Lab Manual pg. 23
	Lab 14	All instruments on the typodont	Lab Manual pg. 24
	Lab 14	All instruments on the typodont	Lab Manual pg. 24
	Lab 15	Intraoral Exam All instruments	Lab Manual pg. 25 PAT Module 13 The Point video material
	Lab 15	Intraoral Exam All instruments	Lab Manual pg. 25 PAT Module 13 The Point video material
	Lab 16	Patient Simulation	Lab Manual pg. 26 <b>Drug cards</b> for each Rx  medication you are taking. <b>Radiographs</b>
	Lab 16	Patient Simulation	Lab Manual pg. 26 <b>Drug cards</b> for each Rx  medication you are taking. <b>Radiographs</b>
	Lab 17	Patient Simulation	Lab Manual pg. 27
	Lab 17	Patient Simulation	Lab Manual pg. 27
	Lab 18	Patient Simulation	Lab Manual pg. 28

Date	Laboratory	Topic	Assignment
	Lab 18	Patient Simulation	Lab Manual pg. 28
	Lab 19	Patient Simulation	Lab Manual pg.29
	Lab 19	Patient Simulation	Lab Manual pg. 29
	Lab 20	Patient Simulation	Lab Manual pg. 31
	Lab 20	Patient Simulation	Lab Manual pg. 31
	Lab 21	Patient Simulation	Lab Manual pg. 34
	Lab 21	Patient Simulation	Lab Manual pg. 34
	Lab 22	Patient Simulation	Lab manual pg. 36
	Lab 22	Patient Simulation	Lab Manual pg. 36
	Lab 23	Patient Simulation	Lab Manual pg. 37
	Lab 23	Patient Simulation	Lab Manual pg. 37
	Lab 24	Patient Simulation	Lab Manual pg. 38
	Lab 24	Patient Simulation	Lab Manual pg. 38
	Lab 25	Patient Simulation	Lab Manual pg. 39
	Lab 25	Patient Simulation	Lab Manual pg. 39
	Thanksgiving Holiday!		

DATE	LABORATORY	TOPIC	ASSIGNMENT
	Lab 26	Patient Simulation	Lab Manual pg. 40
	Lab 26	Patient Simulation	Lab Manual pg. 40
	Lab 27	Patient Simulation	Lab Manual pg. 41 FPI Online Module 26B
	Lab 27	Patient Simulation	Lab Manual pg. 41 FPI Online Module 26B
	Lab 28	Final Practical Exam	Lab Manual pg. 45
	Lab 28	Final Practical Exam	Lab Manual pg. 45
	Lab 29	Final Practical Exam	Lab Manual pg. 45
	Lab 29	Final Practical Exam	Lab Manual pg. 45

## Lecture Schedule

L	ecture 1	t to the second	
į į	lecture 1	Exposure Control	Wilkins Ch-5
		Exposure Management	Review Risk Management Manual
		Waste Disposal	
L	ecture 2	Sterilization Procedures	Wilkins Ch-6
		Discuss Research Topics Assignment	
L	ecture 3	Instrument Design and Classification	Bring your instruments in the cassettes to class.
		Mirrors	FPI Module 5,7
		Fulcrums	Modules 12,13,15,17 (section1-only)
E	xam 1		
L	ecture 4	Disease Transmission	Wilkins Ch-4
L	ecture 5	Dental Record	Wilkins Ch-9,10
		Health History Dental History	PAT Modules 4, 5,6
L	ibrary Day		Meet at the library 9:30
			RM # TBA
L	ecture 6	Vital Signs	PAT Modules 7,8, 9
			Wilkins Ch-11
E	Exam 2	Soft Tissue	PAT Module 11
a	nd	Lesions	Wilkins Ch-12
L	ecture 7	Extra Oral Examination	PAT Module 12
L	ecture 8	Intraoral	Wilkins Ch-12
		Examination Scoring Indices	PAT Module 13

Date	Lecture	Topic	Assignment
	Lecture 9	Dental Charting	Wilkins Ch-16,17
		Restorative Dentistry	Lab Manual pg. 59
	Lecture 10	Tobacco	Wilkins Ch-34
		Counseling	PAT Module 10
	Exam 3		
	Lecture 11	Periodontal Disease	Wilkins Ch-18,19
	Lecture 12	Periodontal	Wilkins Ch-20
		Assessment	PAT Module 14
	Lecture 13	Periodontal Charting	FPI Module 18
	Lecture 14	Periodontal	PAT Module 14
		Disease	Wilkins Ch-20
		Periodontal Assessment	
	Lecture 15	Periodontal Charting	FPI Module 18
	Lecture 16	Guest Speaker	
		(Loupes)	
	Lecture 17	Periodontal	
	Class at 8:00am today only	Debridement	
	Lecture 18	Nonsurgical	Wilkins Ch-41
	Class @8:00	Periodontal	
		Therapy	

Date	Lecture	Topic	Assignment
	Exam 4		
	Lecture 19	Stains/Stain	Wilkins Ch-22,45
		removal	FPI online material 26B
	Lecture 20	Fluoride	Wilkins Ch-36
	Thanksgiving		
	Holiday!		
	Lecture 21	Xerostomia	Material on Blackboard
		Halitosis	
	Exam 5		
	Exam 5		
	Lecture 22	Dental Charting	Practice Exams done in class
	Lecture 22	Dental Gharting	Tractice Exams done in class
	Dental Charting	Dental Charting	Review all Dental Charting
	Exam	Exam	Material
			Enjoy the Holidays!

# DHYG 1431 PRE-CLINICAL DENTAL HYGIENE Course Description:

Foundational knowledge for performing clinical skills on patients with emphasis on procedures and rationale for performing dental hygiene care. Introduction to ethical principles as they apply to dental hygiene care.

Credit Hours 4 hours

**Pre-Requisite:** DHYG 1301 Orofacial Anatomy, Histology & Embryology

**Co-requisites:** DHYG 1304 Dental Radiology, DHYG 1227 Preventive Dentistry

### **Course Goals**

Upon completion of this course, the student will be able to

- 1. Explain the procedures and rationale for dental hygiene care. Dental hygiene care includes: assessment, treatment planning, preventive education and dental hygiene therapy.
- 2. Demonstrate basic dental hygiene instrumentation skills.
- 3. Demonstrate an understanding of the policies and procedures outlined in the Dental Hygiene Risk Management Manual.
- 4. Define ethical principles as they relate to dental hygiene care and identify those facts related to ethics and professionalism that will form the concepts necessary for developing a value system for your future practice.

DHYG 1431 Fall 2018

### **Class Meeting Times and Rooms:**

Lecture – Tuesday and Thursday from 9:30-10:20 a.m. / MPC Room

**Lab** – Meeting place: MPC 131 Dental Hygiene Clinic

Session A – Monday and Wednesday 8:00 to 12:00 a.m. Session B – Tuesday and Thursday 1:00 to 5:00 p.m.

Pre-operative procedures will be accomplished prior to the beginning of each pre-clinic lab session. Arrive early enough to prepare your unit.

**Course Instructor:** Lori Rogers RDH, BS / First Year Clinic Coordinator

Office: Multi-Purpose Center 213

larogers@lit.edu

### **Pre Clinic Instructors:**

Elizabeth Bridges RDH, BA Christine Clowe RDH, BS Renee Sandusky RDH, BS

Michelle DeMoss RDH, BS Danielle Davis RDH

### **Program/Course Policies:**

### 1. Absenteeism

In order to ensure the students in the dental hygiene program achieve the necessary didactic and clinical competencies outlined in the curriculum, it is necessary that the student complete all assigned lecture classes, clinical and laboratory hours. It is the responsibility of the student to attend class, clinic or lab. The instructor expects each student to be present at each session.

If you are unable to attend lecture class, clinic or lab, it is **mandatory that you call the appropriate instructor prior to the scheduled class, clinic or lab time**. The student is responsible for all material missed at the time of absence. Extenuating circumstances will be taken into account. Extenuating circumstances might include but are not limited to: funeral of immediate family member, maternity, hospitalization, etc. If the student has surgery, a debilitating injury or extended illness a doctor's release will be required before returning to clinic.

It is expected that students will appear to take their exams at the regularly scheduled examination time. Make-up examinations will be given only if the absence is due to illness (confirmed by a physicians' excuse), a death in the immediate family, or at the discretion of the instructor.

### Fall/Spring Semesters:

Dental hygiene students will be allowed **two excused absences** in any lecture, clinic or lab. Absences must be accompanied by a written excuse on the next class day. In the event that a student misses class, clinic or lab beyond the allowed absences, the following policy will be enforced:

2 absences = verbal warning

Beginning with 3 absences, 2 points will be deducted from the final course grade for each absence thereafter.

### **Tardiness**

Tardiness is disruptive to the instructor and the students in the classroom. It is expected that students will arrive on time for class, clinic or lab, and remain until dismissed by the instructor. If tardiness becomes an issue, the following policy will be enforced:

Tardy 1 time = verbal warning

Tardy 2 times is considered an absence.

Students should plan on attending classes, labs and clinic sessions as assigned throughout the semester. Family outings, vacations and personal business should be scheduled when school is not in session and will not be considered excuses for missing assignments, examinations, classes, labs or clinic time. Any personal business should be taken care of prior to or after pre-clinic lab sessions. Please inform the instructor of any medical conditions which would require you to leave the clinic or classroom frequently. Medical conditions must be documented with a letter from your physician. In cases of family or other emergencies which may require you to leave clinic or class early, please inform the instructor prior to clinic or class if possible.

Faculty has the authority to modify the above policies if it is determined there are unusual circumstances.

### 2. <u>Examination policy:</u>

Examinations will include information from lectures, handouts, assigned readings, audiovisual material, and laboratory material.

- <u>Make-up examinations</u> will be given <u>only</u> if the absence is due to illness (written confirmation from a doctor is required), a death in the immediate family, or at the discretion of the instructor. Should you choose to miss a class for any reason other than those mentioned and miss an exam; a zero will be assigned for that examination.
- All examinations and scantron sheets must be returned to the instructor to be kept on file. You will have access to your examinations by appointment or during my office hours for two weeks following the date of the exam.

### 3. **Assignments:**

Assignment instructions, due dates and evaluation criteria are included in this syllabus. Any changes to assignments or additional assignments will be announced in class and by personal notification in Blackboard. Please read the evaluation criteria before and as you work on each assignment. Any questions should be directed to me before the assignment is due.

• Assignments are to be submitted by 12 o'clock midnight on the day they are due, unless otherwise noted. Assignments will not be accepted if submitted late. A score of "0" will be recorded for all assignments not submitted

due to absence on the due date unless prior arrangements are made with the instructor.

- All assignments are to be submitted via Blackboard unless otherwise stated.
- **All work will be typed unless otherwise instructed.** All work should be proof read and spell checked. Grammar and readability count!
- Assignments may be submitted early. It is recommended you submit them as soon as they are completed. However, assignments will not be graded until the due date.
- Place your written assignments on Blackboard by attaching a Word document or RTF document to the assignments page.
- **Care must be taken when submitting assignments online**. Please do not assume the assignment submission has been completed, you must follow up to make sure.
- **Partially submitted assignments will be graded as submitted.** You will not be allowed to complete them after the due date.

### 4. <u>Electronic Devices:</u>

Electronic devices are a distraction and are not to be used during class / clinic or laboratory sessions. Tape recorders, iPods, games and cell phones will be **turned off** during these times. If you are expecting an emergency call inform the instructor prior to class, put your phone on vibrate, and sit in an area where you will cause the least disturbance when leaving.

- Texting is not allowed at any time during class /clinic or laboratory sessions. Texting detracts from class participation and you will be asked to leave the room for the remainder of the class.
- Any use of electronic devices during an examination or quiz will be considered **academic dishonesty.** The student will receive a zero on the exam or quiz and may be subject to dismissal from the program. Discuss any unusual or emergency situations with the instructor **prior** to the examination or quiz.
- With prior permission, students may use a laptop or tablet to take notes during class time. The devices cannot be used to surf the web, pick-up emails or for any other non-classroom activity. This is a privilege and it may be taken away at any time and for any reason by the instructor.

### 5. The American with Disabilities Act (ADA):

The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

### **Teaching Methods:**

- 1. Lecture
- 2. Demonstration
- 3. Class discussion and case analysis
- 4. Laboratory exercises
- 5. Individual practice
- 6. Individual and group assignments
- 7. Internet assignments
- 8. Observation and feedback
- 9. One on one instruction

### **Required Texts:**

1. Fundamentals of	Eighth	Jill Nield-	LWW/ Wolters	ISBN
Periodontal	Edition	Gehrig	Kluwer	9781496320209
Instrumentation &				
Advanced Root				
Instrumentation				
2. Patient	Third	Jill Nield-	LWW/ Wolters	ISBN 978-1-
Assessment Tutorials	Edition	Gehrig	Kluwer	4511-3148-2
3. Clinical Practice of the Dental Hygienist	Twelfth Edition	Esther Wilkins	LWW/ Wolters Kluwer	ISBN 978-1- 4511-9311-4

### Online Resources for textbooks

### **Course Equipment, Supplies, Instruments and other Materials:**

The instruments and other supplies students are required to purchase for this course are listed in the Dental Hygiene Program Student Handbook available on the program's web page.

<sup>\*</sup>Each student is required to have access to the online resources accompanying the above textbooks (<a href="mailto:thePoint@lww.com">thePoint@lww.com</a>)

<sup>\*</sup>Each student will register with **dentalcare.com** for other online assignments

### **Course Requirements:**

Course Requiremen			
Lecture			
Internet	1. The Intra and Extra oral Examinations		
Assignments	2. Counseling and treating Bad Breath Patients		
Freshman	1. Attend a Library Orientation and learn how to use the electronic		
Research Project	indices and databases and the interlibrary loan system.		
Topic Assignment	2. Freshman Research Project, Topic investigation		
Portfolio	1. Add information to document your progression		
Examinations	1. Five lecture examinations		
	2. One final examination		
	3. Dental Charting Exam		
Laboratory			
Skill Evaluations	a. Position		
(located in	b. Positioning and Clock Position		
Fundamentals of	c. Instrument Grasp		
Periodontal	d. Mirror and Finger Rests in Anterior Sextants		
Instrumentation)	e. Mirror and Finger Rests in Mandibular Posterior Sextants		
	Mirror and Finger Rests in Maxillary Posterior Sextants		
	g. Movement and Orientation to the Tooth Surface		
	h. Adaptation		
	i. Instrumentation Strokes		
	j. Basic Probing Technique		
	k. Explorers		
	l. Angulation and Calculus Removal		
	m. Sickle Scalers		
	n. Universal Curets		
	o. Area-Specific Curets		
	p. Rubber Cup Polishing		
Skill Checklists	a. Medical History		
(located in	b. Pulse and Respiration		
Patient	Blood Pressure Assessment		
Assessment	d. Head and Neck Examination		
Tutorials)	e. Oral Examination		
-	f. Occlusion		
	g. Gingival Description		

**Course Requirements, Continued** 

Competency	a. Pre and Post Operatory Procedures
Evaluation (Lab	
Manual)	
Written laboratory	a. Midterm – Instrument Design and Classification
examination	
Patient assessment	a. Medical Dental History
procedures	b. Head and Neck Examination
	c. Intraoral Examination
	d. Periodontal Charting
	e. Dental charting
	f. Periodontal assessment
Treatment	a. Calculus removal
procedures	b. Stain removal
	c. Dental biofilm removal
	d. Fluoride application
	e. Instrument sharpening
Rotations	a. Sterilization (4 hours)
	b. Assisting (8 hours)
Laboratory Practical	a. Final Skills Assessment
Examination	

**Program Requirement:** 

	t cmenti			
	Community	Three (3) hours of acceptable community service is required this semester.		
	Service	See the Student Handbook for more information and examples of accepta		
		service. Please ask the 1st year clinic coordinator if you have any questions.		

### **Evaluation Criteria:**

### 1. Lecture

You will be required to complete all assignments, and examinations with a final overall average of 75% or greater.

a. Grading Scale: A= 92-100 B= 83-91 C= 75-82 D= 67-74

F= 66 and below

b. Grade Distribution:

Exam Average60%Dental Charting Exam10%Topic Investigation10%Final Exam20%PortfolioAcceptable

d. Community Service 3 hours of acceptable service completed

### 2. <u>Laboratory</u>

c.

- a. All Skill Evaluations and Checklists must be satisfactorily completed in order to progress to Introductory Clinic.
- b. Pre and Post Appointment Operatory Procedures Competency Evaluation must be successfully completed.
- c. Written Midterm Exam will be averaged with and carry the same weight as the lecture examinations. You will need to maintain a final average of 75% or more in combined lecture and laboratory grades and complete laboratory requirements in order to progress in the Dental Hygiene Program.
- d. The following assessment procedures will be completed on a clinic partner:
  - 1. Medical/dental history
  - 2. Extra and intra oral examination
  - 3. Periodontal assessment
  - 4. Dental charting
- e. The following treatment procedures will be attempted on a partner:
  - 1. Calculus removal
  - 2. Stain removal
  - 3. Biofilm removal
  - 4. Fluoride treatment
- f. Successful completion of the final practical examination.
- g. Rotations through senior clinic (information in this syllabus)
  - 1. 4 hours learning how to prepare instruments and operate the sterilization equipment.
  - 2. 8 hours learning how the clinic functions and assisting the seniors.

### **DHYG 1431 Course Outline**

### Lecture/Laboratory Topic

- A. Introduction to DHYG 1431
- B. Exposure control
  - 1. Personal protective equipment and safety equipment
    - a. Gloves
    - b. Masks
    - c. Eyewear
  - 2. Vaccinations
- C. Disinfection procedures
  - 1. Cleaning
  - 2. Surface classification
  - 3. Chemicals
- D. Sterilization procedures
  - 1. Methods
    - a. Steam
    - b. Dry heat
    - c. Chemical
  - 2. Instrument recirculation
  - . Post Exposure Prophylaxis (PEP)
    - 1. Defined
    - 2. Goal of PEP
    - 3. CDC guidelines
    - 4. LIT policy
- F. Instrument Basics
  - 1. Design of hand-activated instruments
  - 2. Instrument classification assessment instruments
  - 3. Instrument classification—debridement instruments
  - 4. Mirrors
  - 5. Fulcrums
- G. Cumulative trauma injuries
  - 1. Defined
  - 2. Types
  - 3. Prevention
- H. Infectious agents
  - 1. Types of contamination
    - a. Aerosols
    - b. Spatter
  - 2. The most common infectious agents of concern to dentistry

- I. Health histories
  - 1. Define terms
  - 2. Describe types of histories
    - a. Questionnaire
    - b. Interview
    - c. Combination
- J. Vital signs
  - 1. Pulse
  - 2. Respiration
  - 3. Blood pressure
- K. Head and neck examination
  - 1. Terminology
  - 2. Technique
  - 3. Common findings
    - a. Description
    - b. Etiology
- L. Intra oral examination
  - 1. Terminology
  - 2. Technique
  - 3. Common findings
    - a. Description
    - b. Etiology
  - 4. Oral cancer
    - a. Most common sites
    - b. Cancer warning signs
- M. Restorative dentistry and dental charting
  - 1. G. V. Black's Cavity Classification
  - 2. Caries detection techniques
    - a. Explorer
    - b. Transillumination
    - c. Laser
    - d. Radiographic
  - B. Dental charting symbols
- N. Periodontal Disease
  - 1. Basic concepts of the disease process
  - 2. Assessment and Charting
    - 1. Terminology
    - 2. Techniques
- O. Indices and disclosing agents
  - 1. Disclosing agents
  - 2. Indices
    - a. PHP
    - b. LIT bleeding score
- P. Periodontal Debridement and Periodontal Maintenance Therapy

### DHYG 1431 Fall 2018

- 1. Primary objective
- 2. Techniques
- 3. Rationale for recall time interval
- Q. Stains
  - 1. Extrinsic
- R. Stain removal (Polishing)
  - 1. Selective polishing
  - 2. Effects of polishing
  - 3. Techniques
- S. Fluoride Application
  - 1. Topical application techniques
    - a. Gel
    - b. Varnish
- T. Xerostomia
  - 1. Defined
  - 2. Etiology
  - 3. Effects
  - 4. Prevention
  - 5. Treatment options
- U. Halitosis
  - 1. Defined
  - 2. Etiology
  - 3. Assessment techniques
  - 4. Treatment options

### **Laboratory Topics**

- A. Introduction to Dental Equipment
- B. Pre and Post-Operative Procedures
- C. Hand washing
- D. Instrument recirculation
  - 1. Sterilization duty
  - 2. Clinic supplies
- E. Principles of positioning
  - 1. Patient and operator positions
  - 2. Mirror and finger rests in the anterior sextants
  - 3. Mirror/finger rests—mandibular posterior sextants
  - 4. Mirror/finger rests—maxillary posterior sextants
- F. Instrumentation basics
  - 1. Adaptation and angulation
  - 2. Activation, pivot and handle roll
  - 3. Instrumentation stroke

- G. Specific Instruments
  - 1. Sickle Scalers
  - 2. Area Specific Curets
  - 3. Universal Curets
  - 4. 11/12 Explorer
  - 5. Probe
- J. Laboratory patient simulation

### **SPECIFIC LEARNER OBJECTIVES**

<u>Terminology:</u> Each student is responsible for learning the terminology used during lab and lecture classes including the terminology listed at the beginning of each chapter in *Clinical Practice of the Dental Hygienist*.

### **MODULE 1**

### **Standard Precautions**

AT THE COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

Personal Protective Equipment

- 1. Identify the types of PPE available to the dental healthcare worker
- 2. Choose the appropriate PPE for a given procedure
- 3. Discuss latex allergy and contact dermatitis

### Sterilization and Disinfection Procedures

- 1. Define and describe standard precautions
- 2. Differentiate between sterilization and disinfection
- 3. Identify the types of chemicals used for disinfection
- 4. Identify the different types of surfaces in the dental clinic
- 5. Describe the most common methods used to sterilize equipment in a dental office
- 6. Describe systems used to monitor the effectiveness of specific sterilizers
- 7. Describe the procedures that can reduce intraoral microbial counts prior to dental treatment
- 8. Describe three ways to reduce aerosol contamination when using dental instruments.
- 9. Identify treatment room features that optimize infection control efforts
- 10. Define biofilm and identify how to manage dental unit waterline biofilm
- 11. Define medical waste and identify disposal methods
- 12. Identify components of dental office safety protocols regulated by CDC and OSHA

### Post Exposure Prophylaxis

- 1. Define "exposure" as it relates to Post Exposure Prophylaxis (PEP) for HIV, HCV and HBV
- 2. List the exposure factors that seem to be most significant to HIV seroconversion.
- 3. Identify the goal of PEP

- 4. Recognize the CDC guidelines used to determine if PEP would be recommended after an exposure
- 5. Identify two of the three antiretroviral drug classes recommended for PEP and state one reason for their combined use in PEP
- 6. State procedures for follow up on HIV exposed individuals whether or not PEP is used
- 7. Describe the LIT occupational exposure to blood and body fluids and post exposure prophylaxis policies

### Laboratory

- 1. Demonstrate the principles of instrument recirculation as accomplished in the hygiene clinic
- 2. Choose and describe the proper method to disinfect or sterilize an object or surface
- 3. Describe/demonstrate the specific procedures necessary to prepare an operatory for use
- 4. Describe/demonstrate the specific procedures necessary for post appointment decontamination of the operatory
- 5. Demonstrate proper handwashing technique

### **Instrument Design and Classification**

### AT THE COMPLETION OF THE MODULE YOU WILL BE ABLE TO:

- 1. Identify instrument parts and surfaces
- 2. Identify and discuss the design characteristics of each instrument classification
- 3. Define fulcrum and describe the attributes of a properly placed fulcrum

**Cumulative Trauma Injuries** (Students will be tested on the material with the MidTerm exam in clinic)

### AT THE COMPLETION OF THE MODULE YOU WILL BE ABLE TO:

- 1. Describe elements of the neutral operator position
- 2. Define and list the symptoms of the following types of repetitive-strain /cumulative trauma disorders:
  - a. Carpal tunnel syndrome
  - b. Ulnar nerve entrapment
  - c. Pronator syndrome
  - d. Tendinitis
  - e. Tenosynovitis
  - f. Rotator cuff tendonitis
  - g. Extensor wad strain

- h. Thoracic outlet syndrome
- 4. Describe risk factors for repetitive strain injuries/disorders
- 5. Describe strategies for preventing cumulative trauma injuries in dental hygiene practice
- 6. Describe the role of telescopic loupes in preventing cumulative trauma injuries

### Laboratory

- 1. Demonstrate exercises which can be done; during patient care, before patient care and after patient care, that might help prevent cumulative trauma injuries
- 2. Demonstrate/describe the appropriate positioning of the dental unit/chair, clinician, and patient to enhance instrumentation procedures in each area of the mouth
- 3. Demonstrate the elements of the neutral operator position

### Module 2

### **Disease Transmission**

### AT THE COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. Describe the chain of disease transmission
- 2. List methods to break the chain of transmission at every link
- 3. Describe the different ways diseases can be transmitted
- 4. Differentiate between aerosol and spatter
- 5. Identify common pathogenic organisms found in the oral cavity and the diseases they produce
- 6. Identify the pathogenesis (pattern of disease development) of the major infectious diseases the dental profession is concerned with (Wilkins, Table 4-1).
- 7. Explain what can be done to decrease the transmission of tuberculosis in the dental environment
- 8. Identify the various Hepatitis viruses and describe the significance of each to the dental health care worker. (Wilkins, Table 4-2)
- 9. Briefly summarize the disease process of HBV and distinguish between the possible outcomes.
- 10. List major population groups at risk for HBV and HIV
- 11. Describe why the human herpes viruses are of special concern to dentistry and list the eight known to infect humans (Wilkins Table 4-3).
- 12. Predict the legal/ethical implications of not following accepted infection control procedures

### **Documentation**

### AT THE COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. List the elements of patient assessment
- 2. Describe the components of a complete dental record and the elements of a proper chart entry

8. Identify common errors in record maintenance and chart entries

### Laboratory

- 1. Maintain patient records properly
- 2. Make appropriate chart entries

### **Medical/Dental Histories & Vital Signs**

### AT THE COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. Describe the questionnaire and interview methods of obtaining a health history and explain why a combination of both methods is desirable
- 2. Explain why a complete medical history is necessary and list the components of a complete health history
- 3. Identify the rationale for questions on the health history and provide appropriate follow-up questions for positive responses
- 4. Given certain circumstances determine the need for medical consultation prior to dental treatment
- 5. Explain how vital signs are used in determining if a patient is able to withstand dental treatment
- 6. Describe the components of a blood pressure recording. How can the auscultatory gap cause errors in blood pressure measurement and explain how they can be avoided
- 7. Identify and categorize normal and abnormal vital sign values
- 8. Describe recommendations for follow-up based on initial blood pressure measurements for an adult
- 9. Describe the program's policy for treating medically compromised patients.
- 10. State the AHA recommended antibiotic premedication regimen (Table 10-4)
- 11. Identify the need to modify the prophylactic antibiotic premedication recommendation for patients already taking an antibiotic for another condition
- 12. Identify patients who might need antibiotic premedication prior to dental hygiene care (Box 10-2)
- 14. Identify patients' physical status using the ASA classification system

### Laboratory

- 1. Properly demonstrate procedures involved in taking vital signs on your patient/partner
- 2. Demonstrate obtaining a complete medical and dental history on your patient/partner

### Module 3

### Head and Neck and Intraoral Examinations & Dental Charting

AT THE COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. State the purposes and advantages of performing a complete head and neck and intra oral examination for each patient
- 2. List and define the types of examinations (complete, screening, limited, follow-up and maintenance)
- 3. List and describe examination methods (visual, palpation, etc.)
- 4. Define: sign, symptom and pathognomonic
- 5. Compare and contrast the terms predisposing and contributing
- 6. Identify the characteristics to observe in assessing a patient's general appearance and state why they may be significant to treatment
- 7. Identify and name common deviations from normal that may be detected during the examination
- 8. Describe abnormal/atypical lesions according to location, history and clinical characteristics using correct terminology
- 9. List the most common intra oral sites for oral cancer and describe the different manifestations of early oral cancer
- 10. List the warning signs of oral cancer
- 11. Discuss the importance of early detection of oral cancer
- 12. Describe the role of the dental hygienist in preventing oral cancer
- 13. Define and recognize developmental and noncarious dental lesions
- 14. Describe methods of caries detection used in clinical practice: visual, tactile, transillumination, and laser
- 15. Identify strengths and weaknesses of each caries detection method
- 16. Given a variety of carious lesions or restorations, identify the proper classification number using G. V. Black's classification system

### Laboratory

- 1. Using the head and neck and intraoral examination forms identify all of the structures to be examined on your patient/partner in lab.
- 2. Describe and demonstrate the methods of examining each structure in the head and neck and intraoral examinations
- 3. Identify and chart all restorations and findings following LIT soft tissue description and dental charting guidelines
- 4. Use proper terminology to describe all charted findings

### **MODULE 4**

### **Periodontal Disease**

### UPON COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. Describe the concepts related to the development of periodontal disease
- 2. Recognize the difference between a periodontal pocket and a gingival pocket
- 3. Recognize the classifications of gingival disease as stated in Table (19-1)
- 4. Recognize the characteristics of localized and generalized chronic periodontitis

- 5. Identify local and systemic contributing/predisposing factors associated with disease development and progression
- 6. Describe oral self-cleansing mechanisms

### **Periodontal Assessment**

### UPON COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. List the components of a complete periodontal assessment and charting. Show how the findings can be used to determine the AAP periodontal classification.
- 2. List and describe the uses of the probe in a periodontal examination.
- 3. Use correct terminology to describe the clinical appearance (architecture, size, shape, consistency, texture) of the gingiva in health and disease.
- 4. Identify and select specific examples of clinical characteristics to differentiate between gingival and periodontal disease.
- 5. State the significance of bleeding as a sign of gingival inflammation.
- 6. Given a list of clinical changes in the gingival tissues, construct a generalized and/or localized statement describing the condition.
- 7. List radiographic changes that may indicate the presence of periodontal disease.
- 8. Define mucogingival involvement and describe clinical methods of detection.
- 9. Describe tissue height (position of the gingival margin) and demonstrate how to chart tissue heights on the dental chart.
- 10. List predisposing and contributing factors for the initiation and progression of periodontal infections
- 11. List the purposes of a disclosing agent.
- 12. Describe the characteristics of an acceptable disclosing agent.
- 13. Describe the purposes and uses of clinical plaque scores.
- 14. Describe how we use the full mouth bleeding score in the hygiene clinic.
- 15. Describe the patient hygiene performance (PHP) index. Determine and evaluate the numerical outcome of a PHP example.

### Laboratory

- 1. Demonstrate the techniques involved in periodontal assessment on a patient/partner in lab.
- 2. Clinically identify factors that contribute to the development of gingival and periodontal disease, if seen in your patient/partner.
- 3. Determine a PHP Score and bleeding score on your patient/partner in lab.

### Periodontal Debridement and Recare

### UPON COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. State the primary objective of periodontal debridement and describe how instrumentation and other dental hygiene procedures contribute to achieving this objective
- 2. Describe the following elements of periodontal deposits/debridement: attached dental biofilm biofilm removal

unattached dental biofilm bacterial byproducts

closed debridement endotoxin

surgical debridementdental biofilm retentive factorsscaling and root planingpathologically deepened sulcusperiodontal debridementsulcus with increased depth

- 3. Explain how to accomplish an immediate evaluation of a treated area
- 4. State appropriate patient instructions following periodontal treatment
- 5. List the clinical endpoints of successful non-surgical instrumentation
- 6. State the effect of therapy on pocket microorganisms (Table 41-1)
- 7. Describe the role of the patient in achieving and maintaining periodontal health
- 8. Explain the rationale behind the 1 2 week follow-up evaluation after periodontal therapy

### Laboratory

1. Identify possible reasons for the following instrumentation difficulties:

Unable to see the treatment area Unable to locate the calculus

Poor lighting of the treatment area

Adaptation problems

Uncontrolled or weak working strokes

Missed calculus: Deposits missed at the midlines of anterior teeth

Deposits missed at the line angles of posterior teeth

Deposits missed on proximal surfaces

- 2. Self-evaluate instrumentation skills and propose solutions to instrumentation problems
- 3. Use hand instruments to remove supra and subgingival calculus deposits from your patient/partner

### **MODULE 5**

### **Extrinsic Stains**

### UPON COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. Classify stains by location and source.
- 2. List the clinical features, composition, etiology and clinical approach for removing the following types of stains:

yellow stain brown pellicle green stain brown food stains black line stain anti-biofilm agents tobacco stain orange and red stains

stannous fluoride stain metallic stains

3. Identify and explain the formation of stains occurring in pulpless teeth, tetracycline stained teeth and stains resulting from silver amalgam

### Stain Removal/Polishing

### UPON COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. Define selective polishing and identify instances when polishing is contraindicated
- 2. State the effects of polishing on the tooth surface, the gingiva and restorations
- 3. Identify instances when polishing is indicated
- 4. Describe different techniques for polishing interproximal areas
- 5. Explain the relationship of polishing to the therapeutic and cosmetic goals of oral care in a manner that a patient might understand

### Laboratory

1. Select the proper polishing agent or dentifrice for your patient and demonstrate selective polishing on your patient/partner in the lab

### **MODULE 6**

### Fluoride Application

### UPON COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. Describe ways to prevent accidental fluoride ingestion in the dental office
- 2. List procedures to reduce fluoride ingestion during topical application
- 3. Describe the criteria used to determine if a fluoride tray fits properly
- 4. Explain why fluoride varnish would be used instead of a fluoride gel professional treatment

### Laboratory

- 1. Demonstrate the tray technique for the application of topical fluoride on your patient/partner
- 2. Demonstrate fluoride varnish application on you patient/partner

### Xerostomia and Halitosis

### UPON COMPLETION OF THIS MODULE YOU WILL BE ABLE TO:

- 1. Define xerostomia
- 2. State the causes and effects of xerostomia
- 3. Describe techniques and products that can be used to manage xerostomia
- 4. Define halitosis
- 5. State the possible sources of oral malodor
- 6. Discuss methods of detecting halitosis
- 7. Describe techniques and products that can be used to manage halitosis

### **MODULE 7 (LABORATORY)**

### **Instruments and Instrumentation**

AT THE COMPLETION OF THE MODULE YOU WILL BE ABLE TO:

- 1. Describe the characteristics of a well-adapted instrument
- 2. Demonstrate how to correctly adapt an instrument on the typodont and in the mouth
- 3. State the correct working angulation and describe/demonstrate how to clinically determine if the correct angulation is being used for each of the following instruments:
  - a. explorers
  - b. anterior and posterior sickles
  - c. universal curet
  - d. area specific curets
  - e. periodontal probes
- 4. Identify the elements of instrumentation that work towards achieving stability during the activation of an instrument
- 5. Combine knowledge of the following to describe how to activate a calculus removal stroke
  - a. graspb. fulcrumf. stroke directiong. stroke length
  - c. adaptation h. combined hand, wrist, arm motions
  - d. angulation i. stroke completion
  - e. lateral pressure
- 6. Explain which elements of the calculus removal stroke would be modified during an assessment stroke
- 7. Demonstrate correct use of the following instruments on the typodont and in the mouth:
  - a. explorers
  - b. anterior and posterior sickles
  - c. universal curet
  - d. area-specific curets
- 8. Identify errors and describe their consequences in the following elements of instrumentation:
  - a. graspb. fulcrumd. angulatione. lateral pressure
  - c. adaptation f. hand, wrist, arm motion
- 9. Determine the basic purpose of the following instruments in the assessment phase of dental hygiene care
  - a. mouth mirror b. explorer c. probe

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- 10. Describe the specific uses of the explorer designs included in the student kit
- 11. Describe the elements of calculus detection and how the clinician might describe sensations felt during subgingival exploration
- 12. Attempt to detect calculus in the lab on your patient/partner
- 13. Compare the design characteristics of the area-specific curets to the characteristics of a universal curet
- 14. Determine which type of hand instrument and which instrument design is most appropriate to use based on the type and location of deposits
- 15. Compare and contrast the difficulties inherent in subgingival vs. supra gingival instrumentation
- 16. Describe the purpose of the air/water syringe
- 17. Explain the procedure for using the air/water syringe
- 18. Describe the improper use of the air/water syringe
- 19. Identify errors in fulcrum placement and relate how instrumentation is affected
- 20. Identify procedures used to increase hand dexterity and strength

### **APPENDIX 1**

### **ONLINE ASSIGNMENT INSTRUCTIONS**

### ONLINE COURSE COMPLETION INSTRUCTIONS

Follow the link below to dentalcare.com

http://www.dentalcare.com/en-US/home.aspx

You will have to register to get to the Education Courses. Register as a "Dental Hygiene Student"

Once registered you may enter the following assignment numbers in the spaces indicated under "Continuing Dental Education" on the "Education" tab.

Assignment numbers:

The Intra and Extraoral Examinations:

Counseling and Treating Bad Breath Patients:

### APPENDIX 2

# RESEARCH PROJECT INSTRUCTIONS FOR IDENTIFYING POTENTIAL TOPICS

### Preparation for Choosing a Research Project Topic

Your assignment is to identify 2 subjects for a research project. This project will culminate in an oral presentation to your peers at the end of the spring semester. You will be revising your presentation over the summer months to prepare to present it to members of the professional dental community in the fall. Students are encouraged to also consider presenting their research during Table Clinic Presentations at the annual SCADHA meeting in February. There is also an option to take your research project to the Texas ADA, TDHA meetings the following spring.

- 1. Identify 2 subjects you would enjoy researching and writing a detailed paper about.
  - The subjects must be narrow in focus not broad.
    - o How periodontal disease affects cardiovascular health as opposed to periodontal disease.
    - Ask your advisor or other faculty member for some direction in this process. They can help you take a broad subject and narrow it down.
  - You need to make sure there is enough easily obtainable information so you have a relatively broad base of knowledge to research.
    - o An obscure topic such as "The relationship of ginkgo biloba to dental caries" would yield little, if any, valid information.
  - Make sure there is information from unbiased sources available.
    - Companies that produce products always have research that proves their products work. You want to find information from sources unaffiliated with the company to confirm the companies test results
  - The information must be current, published no earlier than 2011.
  - The information MUST NOT come from consumer sources.
    - o Ladies Home Journal is nice but it is not a professional source.
    - If you have any doubts as to whether your information is from an acceptable source ASK before you hand in the information. YOU WILL NOT BE GIVEN CREDIT FOR CONSUMER INFORMATION.
- 2. Identify 4 articles from **professional peer reviewed** sources (journals or internet) for **EACH** topic with a **complete reference page entry** according to the **APA documentation system.**
- 3. Hand in a copy of the most informative article you found for <u>each</u> topic.
- 4. I expect you to use both the internet and regular library resources for your information.

### What you will hand in:

- A brief explanation of the topics you have chosen and why you think these would be useful to a practicing dental hygienist or DDS (Paragraph format about 100 to 150 words in length each).
- Four reference page entries, following the APA documentation style, for the journal or internet articles you have found for each topic.
- One printout or copy of the most informative article for each topic.

	PRE-CLINICAL DENTAL HYGIENE DHYG 1431 (2016)  Research Topics					
LIT Competency		<ul><li>2. Assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care.</li><li>4. Communicate effectively with individuals and groups from diverse populations both verbally and in writing.</li></ul>				
Student			Date			
Top	ics					
ADA		n accordance with the standards set forth by the Dental Hygiene Program, has demonstrated the eria.	Possible Points	Points Awarded		
1	Submitte	ed on time.	1			
2	chose th	Explanation of topic includes why the student e topic and why information on the topic is nt or useful for a practicing dental hygienist or	2			
2	Topic 2: Explanation of topic includes why the student chose the topic and why information on the topic is important or useful for a practicing dental hygienist or DDS		2			
3	_	Student submits four (4) separate articles from iewed journals or appropriate professional web	4			
	Topic 2: Student submits four (4) separate articles from peer reviewed journals or appropriate professional web sites		4			
4	Each ref	erence page entry follows the APA format	4			
5	Submitte	ed articles were published no earlier than 2011	4			
6	A copy of for each	of one article (the most informative) is submitted topic	2			
7	Written explanation has few (less than 3) grammatical errors		2			
	Total Po	ints	25			

# APPENDIX 3 INSTRUCTIONS FOR CASE STUDIES

### **2017 Case Study Instructions**

Students need to look at the cases (PAT Module) and be familiar enough to ask and answer questions.

- 1. Look at the medical history, dental history and medication lists
  - Be able to **summarize** the conditions and diseases found
    - Note conditions you think might have an impact on dental hygiene care and what that impact might be. If you can suggest a way to manage the dental implications do so.
  - Describe any dental implications associated with the patient's drugs and any steps you might be able to take to deal with these.
  - Formulate questions you will need to ask to get more information from the patient, if necessary.
  - Determine whether you will need a medical consultation and state why.
  - DO NOT go over the entire medical history just give us the important facts.
- 2. Head/neck and oral examinations
  - Prepare a **summary** of your findings
  - Correlate to the medical/dental/medication information
  - How do you think these will impact dental hygiene care?
  - Tell us just highlights of the information needed to make decisions about how to care for the patient.
- 3. Dental findings
  - Prepare a **summary** of your findings, don't forget the radiographs.
  - Correlate to the medical/dental/medication information
  - What is the significance of these findings?
  - DO NOT tell us about every restoration on every tooth but DO tell us what is important for us to be able to make decisions about their care.
- 4. Gingival/periodontal findings
  - **Summarize** gingival/periodontal findings (remember to examine the periodontal tissues in the radiographs provided)
  - Correlate to the medical/dental/medication information
  - What is the patient's periodontal case type?
  - Summarize the information.

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5. (Discussion, see below) Decide what dental hygiene care you think would be appropriate. How many appointments do you think you will need? Prepare this information for your discussion.

### Discussion

There will be a presentation of the information in 1 through 4 above...then 5 is a discussion of the case study. Prepare questions you can ask the class. These are a few examples to get you started!

- Are there any other questions or information you think would be necessary before treating this patient?
- Is there any further discussion of the dental implications of the histories, etc.?
- What DH treatment do you think is necessary? How many appointments?

Whatever questions you ask the class, you will need to have the answers for.....so be prepared.

# APPENDIX 4 GRADE COMPUTATION SHEET

### **GRADE COMPUTATION SHEET**

Exam Average $x.60 =$	
Dental Charting Exam x .10 =	
Research Topic Investigation x .10	=
Final Exam x .20 =	
Add total points	
Final Letter Grade	
	A= 92-100 B= 83-91 C= 75-82* D= 67-74 F= 0-66

<sup>\*</sup> A minimum grade of 75 must be earned to progress in the program.