

Pre-Clinical Dental Hygiene (DHYG 1431.5A1,5B1)

CREDIT

SCH Semester Credit Hours: 4 (2 hours lecture, 6 Lab hours lab)

MODE OF INSTRUCTION

Face to Face

PREREQUISITE/CO-REQUISITE:

Prerequisite: DHYG 1301

Co-Requisite: DHYG 1304, DHYG 1227

COURSE DESCRIPTION

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

COURSE OBJECTIVES/END OF COURSE OUTCOMES

Upon completion of this course, the student will be able to explain the procedures and rationale for dental hygiene care; demonstrate basic dental hygiene instrumentation skills; and define ethical principles related to dental hygiene care.

INSTRUCTOR CONTACT INFORMATION

Instructor: Lori Rogers
Email: larogers@lit.edu
Office Phone: 409-247-5159
Office Location: MPC 210
Office Hours: M 1-3pm, T 9-10am, W 1-3pm, Th 9-10am, F 8-9am

REQUIRED TEXTBOOK AND MATERIALS

1. Wilkins' Clinical Practice of the Dental Hygienist, 14 th edition	Linda D. Boyd, Lisa F. Mallonee	Jones & Bartlett Learning, 2023, ISBN 9781284264203 (Digital Premier Access-eBook and workbook)
2. Patient Assessment Tutorials A Step-by-Step Guide for the Dental Hygienist, enhanced 4 th edition	Jill S. Gehrig	Jones & Bartlett Learning, 2018, ISBN 9781284240924 (Spiral Bound + Advantage Access)



**LAMAR INSTITUTE
OF TECHNOLOGY**

3. Fundamentals of Periodontal Instrumentation & Advanced Root Instrumentation, enhanced 9 th edition	Jill S. Gehrig	Jones & Bartlett Learning, 2026, ISBN 9781284019339 (Paperback + Advantage Access)
4. Instrument Kit	Pre-ordered	Hu-Friedy Instrument Co.
5. Supply Kit	Pre-ordered	Patterson Dental Supply
6. Uniform	Instructions given at orientation	WonderWink
7. Lab Coat	Pre-ordered	Denline
8. Miscellaneous items for lab use		Student Handbook

**There might be other resources available on Blackboard Learn that are not listed under Assignments, please check the modules for additional videos, reading assignments or website regarding the chapters. * Schedule may be adjusted as deemed necessary.*

COURSE CALENDAR

DATE	LAB	TOPIC	PREPARATION
8-24	Lab 1	Preparing for patient treatment	*Wilkins Ch-5-7 *Review Lab 1
8-25	Lab 1	Preparing for patient treatment	*Wilkins Ch-5-7 *Review Lab 1
8-26	Lab 2	Mathematical Principles, positioning, injuries, instrument grasp	*FPI Online content 1B, Modules 1,2,3
8-27	Lab 2	Mathematical Principles, positioning, injuries, instrument grasp	*FPI Online content 1B, Modules 1,2,3
8-28 (Friday)	<i>ALL STUDENTS</i> - Medical Emergency Simulation Training (12:30 pm – 3:30 pm)	Emergency simulations with LIT EMT Program	
8-31	Lab 3	Sterilization, mirror use, finger rests	Wilkins Ch-7 FPI 4,5
9-1	Lab 3	Sterilization, mirror use, finger rests	Wilkins Ch-7 FPI 4,5
9-2	Lab 4	Posterior finger rests, emergency equipment, supplies location	FPI 6,7
9-3	Lab 4	Posterior finger rests, emergency equipment, supplies location	FPI 6,7
9-7	Labor Day Holiday	No Clinic	
9-8	Lab 5	Technique:	FPI 9,10

		Movement, adaptation	
9-9	Lab 5	Technique: Movement, adaptation	FPI 9,10
9-10	Lab 6	Instrumentation strokes, ODU 11/12 explorer	FPI 11,13
9-14	Lab 6	Instrumentation strokes, ODU 11/12 explorer	FPI 11 and 13
9-15	Lab 7	Health history	Wilkins Ch-11 PAT 1-7
9-16	Lab 7	Health history	Wilkins Ch-11 PAT 1-7
9-17	Lab 8	Vital signs, Technique: supragingival calculus removal, sickle scalers	PAT 8-10 FPI 14,15
9-21	Lab 8	Vital signs, Technique: supragingival calculus removal, sickle scalers	PAT 8-10 FPI 14,15
9-22	Lab 9	Technique: subgingival calculus removal, universal curets	FPI 16,17
9-23	Lab 9	Technique: subgingival calculus removal, universal curets	FPI 16,17
9-24	Lab 10	Probe	FPI 12,18
9-28	Lab 10	Probe	FPI 12,18
9-29	Lab 11	Head and Neck Exam	PAT 13 Wilkins Ch-13
9-30	Lab 11	Head and Neck Exam	PAT 13 Wilkins Ch-13

10-1	Lab 12	Mid-term Exam & Competency	
10-5	Lab 12	Mid-term Exam & Competency	
10-6	Lab 13	Intraoral Exam	PAT 12,14 Wilkins Ch-13
10-7	Lab 13	Intraoral Exam	PAT 12,14 Wilkins Ch-13
10-8	Lab 14	Patient Simulation	Head and Neck Exam
10-12	Lab 14	Patient Simulation	Head and Neck Exam
10-13	Lab 15	Patient Simulation	Oral Exam
10-14	Lab 15	Patient Simulation	Oral Exam
10-15	Lab 16	Patient Simulation	Dental Charting
10-19	Lab 16	Patient Simulation	Dental Charting
10-20	Lab 17	Patient Simulation	Periodontal Assessment
10-21	Lab 17	Patient Simulation	Periodontal Assessment
10-22	Lab 18	Patient Simulation	Plaque, Bleeding Score
10-26	Lab 18	Patient Simulation	Plaque, Bleeding Score
10-27	Lab 19	Patient Simulation	Periodontal Assessment
10-28	Lab 19	Patient Simulation	Periodontal Assessment
10-29	Lab 20	Patient Simulation	Calculus Detection
11-2	Lab 20	Patient Simulation	Calculus Detection
11-3	Lab 21	Patient Simulation	Debridement
11-4	Lab 21	Patient Simulation	Debridement

11-5	Lab 22	Patient Simulation	Debridement
11-9	Lab 22	Patient Simulation	Debridement
11-10	Lab 23	Patient Simulation	Debridement
11-11	Lab 23	Patient Simulation	Debridement
11-12	Lab 24	Patient Simulation	Debridement
11-16	Lab 24	Patient Simulation	Debridement
11-17	Lab 25	Patient Simulation	Polish, FL
11-18	Lab 25	Patient Simulation	Polish, FL
11-19	Lab 26	Patient Simulation	Comprehensive Care
11-23	Lab 26	Patient Simulation	Comprehensive Care
11-24	Final Practical Skills Exam	Group 1	
11-25	Thanksgiving Holiday	No Clinic	
11-26	Thanksgiving Holiday	No Clinic	
11-30	Final Practical Skills Exam	Group 1	
12-1	Final Practical Skills Exam	Group 2	
12-2	Final Practical Skills Exam	Group 2	

*There might be other resources available on Blackboard Learn that are not listed under Assignments, please check the modules for additional videos, reading assignments or website regarding the chapters. * Schedule may be adjusted as deemed necessary.

ATTENDANCE POLICY

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. 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 5 (confirmed by a physicians' excuse), a death in the immediate family, or at the discretion of the instructor.

If students are unable to attend lecture class, clinic or lab, it is **mandatory** that you contact 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 to determine if the absence is excused. Extenuating circumstances might

include but are not limited to the funeral of immediate family member, maternity, hospitalization, etc. If the student has surgery, a debilitating injury, or an extended illness, a doctor's release will be required before returning to clinic.

a. 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 = notification in Starfish Beginning with the third absence, 2 points will be deducted from the final course grade for each absence thereafter. Two (2) points will be deducted from the final course grade for each unexcused absence.

Tardiness

Tardiness is disruptive to the instructor and the students in the classroom. A student is considered tardy if not present at the start of class, clinic or lab. 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 = notification in Starfish Tardy 2 times = is considered an unexcused absence. (See the definition of an unexcused absence) If a student is more than 15 minutes late to any class period, it will be considered an unexcused 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.**

DROP POLICY

If you wish to drop a course, you are responsible for initiating and completing the drop process by the specified drop date as listed on the Academic Calendar. If you stop coming to class and fail to drop the course, you will earn an "F" in the course.

STUDENT EXPECTED TIME REQUIREMENT

For every hour in class (or unit of credit), students should expect to spend at least two to three hours per week studying and completing assignments. For a 3-credit-hour class, students should prepare to allocate approximately six to nine hours per week outside of class in a 16- week session OR approximately twelve to eighteen hours in an 8-week session. Online/Hybrid students should expect to spend at least as much time in this course as in the traditional, face to face class

COURSE REQUIREMENTS- PRECLINIC LAB

Laboratory	
Emergency Simulation	a. Mandatory completion of Dental Hygiene- Medical Emergency Simulation Training with the LIT EMT program (<i>See Appendix 8</i>)
Skill Checklists <i>(located in Fundamentals of Periodontal Instrumentation)</i>	a. Position b. Positioning and Clock Position c. Instrument Grasp d. Mirror and Finger Rests in Anterior Sextants e. Mirror and Finger Rests in Mandibular Posterior Sextants f. 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 Adaptation m. Sickle Scalers n. Universal Curets o. Cosmetic Polishing
Medical History and Vital Signs	a. Mandatory completion of Dental Hygiene- Medical History intake and Vital Signs Training with the LIT Nursing program
Skill Checklists <i>(located in Patient Assessment Tutorials)</i>	a. Medical History b. Pulse and Respiration c. Blood Pressure Assessment d. Head and Neck Examination e. Oral Examination f. Occlusion g. Gingival Description
Competency Evaluation	a. Pre and Post Operatory Procedures
Written Laboratory Examinations	a. Midterm – Instrument Design and Classification-pass 75% or higher b. Dental Charting-pass 75% or higher
Skills Checklists <i>(located in Patient)</i>	a. Medical Dental History b. Head and Neck Examination c. Intraoral Examination d. Periodontal Charting e. Dental charting f. Periodontal assessment

Assessment Tutorials)	
Treatment Procedures	a. Calculus removal b. Stain removal c. Dental biofilm removal d. Fluoride application
Outside Clinic Rotations	a. Sterilization (4 hours) b. Assisting (4 hours)
Laboratory Practical Examination	a. Final (skills assessment on a typodont)

PRE-CLINIC LAB ASSESSMENT REQUIREMENTS:

Skill Evaluations and Checklists are graded as Acceptable/Satisfactory or Unacceptable. (S or U)

1. All listed Skill Evaluations and Checklists must be satisfactorily completed (S) to successfully complete DHYG 1431 and progress to Introductory Clinic.
2. Pre- and Post-Appointment Operatory Procedures Competency Evaluation must be successfully completed.
3. Written Midterm examination and Dental Charting Examination will be averaged with and carry the same weight as the lecture examinations (10% each). You will need to maintain a final average of 75% or better in lecture and earn all satisfactory laboratory grades to progress in the Dental Hygiene Program.
 - a. Midterm – Instrument Design and Classification
 - b. Dental Charting Exam
4. You will be required to *attempt* the following assessment procedures on a clinic partner:
 - a. Medical/dental history
 - b. Extra and intra oral examination
 - c. Periodontal assessment
 - d. Dental charting
5. You will attempt to *complete* the following treatment procedures:
 - a. Calculus removal
 - b. Stain removal
 - c. Biofilm removal
 - d. Fluoride treatment
 - e. Instrument Sharpening

6. Successful completion of the final practical examination.
7. Rotations through senior clinic
 - a. 4 hours learning how to prepare instruments and operating sterilization equipment.
 - b. 4 hours learning how the clinic functions and assisting second-year students.

Skill Applications, Skill Building Activities and Evaluations

Students should review and be familiar with the skill applications and skill building activities within each module prior to the laboratory session.

Students are expected to complete the Self-Evaluation found at the end of each module assigned.

Instructors will evaluate your performance/techniques using the “Self-Evaluation” criteria found in the book. The instructor evaluations should be finished by the “completion” dates listed for each laboratory session.

Mandatory Interprofessional Training

Students should understand the roles of the healthcare team and effectively interact and communicate with other health-care professionals, to promote the safe delivery of dental hygiene services. Students are required to complete two interprofessional training events, in collaboration with the Lamar Institute of Technology EMS program and Nursing program.

COURSE EVALUATION

Student will be required to complete both the lecture and preclinical lab portions of the course. All course requirements must be met. Graded exams must meet 75% or better. All preclinical lab Skill Evaluations and Checklists must be satisfactorily completed in order to successfully complete DHYG 1431 and progress to Introductory Clinic.

Final grades will be calculated according to the following criteria:

Lecture examinations (5 x 10%)	50%
Midterm Lab practical exam	10%
Comprehensive final examination (lecture)	20%
Dental charting Lab exam	10%
Research Project, Topic Investigation (lecture)	10%

GRADING SCALE:

A	=	92 - 100
B	=	83 - 91
C	=	75 – 82
D	=	60 - 74
F	=	59 and below

LIT does not use +/- grading scales

ACADEMIC DISHONESTY

Students found to be committing academic dishonesty (cheating, plagiarism, or collusion) may receive disciplinary action. Students need to familiarize themselves with the institution's Academic Dishonesty Policy available in the Student Catalog & Handbook at <http://catalog.lit.edu/content.php?catoid=3&navoid=80#academic-dishonesty>.

TECHNICAL REQUIREMENTS

The latest technical requirements, including hardware, compatible browsers, operating systems, etc. can be online at <https://lit.edu/online-learning/online-learning-minimum-computer-requirements>. A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of online technology and resources.

DISABILITIES STATEMENT

The Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. LIT provides reasonable accommodations as defined in the Rehabilitation Act of 1973, Section 504 and the Americans with Disabilities Act of 1990, to students with a diagnosed disability. The Special Populations Office is located in the Eagles' Nest Room 129 and helps foster a supportive and inclusive educational environment by maintaining partnerships with faculty and staff, as well as promoting awareness among all members of the Lamar Institute of Technology community. If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409)-951-5708 or email specialpopulations@lit.edu. You may also visit the online resource at [Special Populations - Lamar Institute of Technology \(lit.edu\)](#).

STUDENT CODE OF CONDUCT STATEMENT

It is the responsibility of all registered Lamar Institute of Technology students to access, read, understand and abide by all published policies, regulations, and procedures listed in the *LIT Catalog and Student Handbook*. The *LIT Catalog and Student Handbook* may be accessed at www.lit.edu. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

ARTIFICIAL INTELLIGENCE STATEMENT

Lamar Institute of Technology (LIT) recognizes the recent advances in Artificial Intelligence (AI), such as ChatGPT, have changed the landscape of many career disciplines and will impact many students in and out of the classroom. To prepare students for their selected careers, LIT desires to guide students in the ethical use of these technologies and incorporate AI into classroom instruction and assignments appropriately. Appropriate use of these technologies is at the discretion of the instructor. Students are reminded that all submitted work must be their own original work unless otherwise specified. Students should contact their instructor with any questions as to the acceptable use of AI/ChatGPT in their courses

STARFISH

LIT utilizes an early alert system called Starfish. Throughout the semester, you may receive emails from Starfish regarding your course grades, attendance, or academic performance.

Faculty members record student attendance, raise flags and kudos to express concern or give praise, and you can make an appointment with faculty and staff all through the Starfish home page. You can also login to Blackboard or MyLIT and click on the Starfish link to view academic alerts and detailed information. It is the responsibility of the student to pay attention to these emails and information in Starfish and consider taking the recommended actions. Starfish is used to help you be a successful student at LIT.

ADDITIONAL COURSE POLICIES/INFORMATION

Examination and Quiz Policy

Examinations will be based on objectives, lecture notes, handouts, assigned readings, audiovisual material and class discussions. Major examinations will consist of multiple choice, true/false, matching, short answer, and case study questions. No questions will be allowed during exams.

Students are expected to complete examinations as scheduled. 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. All make-up examinations must be taken within two (2) weeks from the scheduled exam date. All examinations will be kept on file by the Instructor. Students may have access to the examination by appointment during the Instructor's office hours. Exams may be reviewed up to two (2) weeks following the exam date. **You may not copy, reproduce, distribute or publish any exam questions.** This action may result to dismissal from the program. A grade of "0" will be recorded for all assignments due on the day of absences unless prior arrangements have been made with the Instructor.

Respondus Lockdown Browser and Respondus Monitor will be used for examinations taken off campus; therefore, a webcam is required to take the test. The student is required to show the testing environment at the beginning of the exam to assure the instructor that it is clear of any study materials. Failure to do so will result in a 10-point exam grade deduction.

If you need online assistance while taking the test, please call Online Support Desk at 409-951-5701 or send an email to lit-bbsupport@lit.edu.

Respondus Lockdown Browser will be used for examinations administered on campus. The student is required to bring their own portable electronic device for any scheduled on-campus exams, unless a testing lab is being utilized. Approved devices include a personal laptop, tablet, or ipad.

Academic Integrity

It shall be considered a breach of academic integrity (cheating) to use or possess on your body any of the following devices during any examination unless it is required for that examination and approved by the instructor: cell phone, smart watch/watch phone, electronic communication devices (including optical), and earphones connected to or used as electronic communication devices. It may also include the following: plagiarism, falsification and fabrication, abuse of academic materials, complicity in academic dishonesty, and personal misrepresentation.

Use of such devices during an examination will be considered academic dishonesty. The examination will be considered over, and the student will receive a zero for the exam. Students with special needs and/or medical emergencies or situations should communicate with their instructor regarding individual exceptions/provisions. It is the student's responsibility to communicate such needs to the instructor.

Electronic Devices

Portable electronic devices may only be used in class or lab for accessing approved course content (eBooks, slides, publisher content, Blackboard, etc.). Texting or web browsing will not be allowed during class, lab, or clinic. Students are prohibited from recording instructors during class without the consent of the instructor (audio or video).

Late coursework

Assignments, Quizzes and Tests must be completed by the due date. Late submissions or completion will not be accepted and will result in a zero for that assignment/quiz/test.

Remediation

Remediation is required when a student does not meet course requirements or performance expectations. Remediation is designed to identify deficiencies, provide targeted instruction, and support the student in achieving the expected level of performance.

All remediation must be documented using the program's approved remediation forms for clinical and didactic coursework.

Didactic Remediation

Didactic remediation is required when a student does not meet course objectives, exam standards, or minimum academic expectations.

Requirements

- Students receiving a failing grade on any major exam must meet with the instructor within 2 weeks to initiate remediation.
- Remediation will include targeted review, assigned activities, and re-evaluation as determined by the instructor.
- All assigned remediation activities must be completed by the specified deadline.

Documentation

All didactic remediation will be completed using the Didactic Remediation Agreement form, including:

- Identified areas of deficiency
- Assigned remediation plan
- Completion timeline
- Student and faculty acknowledgment

Clinical Remediation

Clinical remediation is required when a student demonstrates unacceptable performance in clinical skills, procedures, or patient care.

Requirements

- Clinical remediation must be initiated on the same day the deficiency is identified.
- Remediation will be completed under the direct supervision of a clinical instructor.
- Only the identified deficient skill(s) will be addressed.
- The student must be re-evaluated immediately following remediation.

Outcome

- The student must demonstrate improvement during re-evaluation.
- If performance remains unacceptable, additional remediation or clinical consequences may be assigned at faculty discretion.

Documentation

All clinical remediation will be recorded on the Clinical Remediation Agreement form, including:

- Specific deficiency
- Remediation provided
- Re-evaluation outcome
- Student and faculty acknowledgment

Student Responsibility and Progression

- Remediation is mandatory and must be completed as assigned.
- Remediation supports learning but does not guarantee improved performance or passing the course.
- Students remain responsible for meeting all course requirements and demonstrating required performance levels.
- Failure to meet course requirements after remediation may result in a final course grade of "F" in accordance with program policy.

*** Faculty has the authority to modify the above policies if unusual circumstances mandate a change. Please refer to the Student Handbook for a complete listing of program policies.**

COURSE OUTLINE

1. Introduction to dental equipment, handwashing, pre and post operator preparations
2. Positioning for the patient and operator, injuries, instrument grasp
3. Sterilization procedures, mirror use, finger rests
4. Finger rests, emergency equipment, location of supplies
5. Technique essentials
6. Instrument Strokes, explorer
7. Universal curet
8. Probe
9. Head and Neck Exam
10. Midterm Evaluation covering preparing to treat the patient and instrument design and classification
11. Intraoral exam
12. Dental charting
13. Periodontal assessment
14. Periodontal charting
15. Calculus removal
16. Polishing and fluoride application
17. Patient simulation: Assessment, calculus removal, polishing, and fluoride application
18. Final Practical Skills Evaluation

COURSE OBJECTIVES Upon completion of this course, the student will be able to explain the procedures and rationale for dental hygiene care; demonstrate basic dental hygiene instrumentation skills; and define ethical principles related to dental hygiene care. There are 26 labs. Each lab has objectives listed.

Appendix 1

Labs

LAB 1 Introduction to Dental Equipment

Introduction to equipment

Handwashing

Pre and Post-operative procedures

Assembly of the simulation manikin

Preparation: Wilkins, Chapters 5 and 6

Review Handwashing and pre/post appointment checklists

Review Pre and Post Operatory Competency form

Materials: Personal Protective Equipment - PPE

Utility gloves, exam gloves, mask, lab coat, face shield

Operator safety glasses for use when not wearing face shield

Black or blue pen, retractable eraser

Typodont (Manikin Assembly will be demonstrated)

Objectives: At the completion of this lab session you will be able to:

1. Identify and properly adjust the equipment in the operatory
2. Demonstrate proper handwashing technique and exam glove placement
3. Describe/demonstrate pre-operative procedures
4. Describe/demonstrate post-operative procedures

Instructions: Students will be assigned to a unit. There will be a brief group discussion. Each instructor will review the equipment and its functions within their group. Instructors will demonstrate proper handwashing and exam glove placement in groups. Students will practice handwashing, putting on and taking off gloves. After students demonstrate these skills, one instructor will demonstrate pre and post operatory preparations for everyone. Finally, students will familiarize yourself with the equipment and prepare the operatory for patient reception. After an instructor has checked the preparations, you will perform post-operative procedures. At the end of the session the instructors will demonstrate how to set up the simulation manikins. No skill evaluations are required for this lab. Instructors will initial checklist in the students printed lab manual if student successfully demonstrates handwashing and pre and post-operative procedures.

HANDWASHING DEMONSTRATION Instructor initials _____ Date: _____**Equipment Preparation:**

1. Provides paper towels, soap, gloves, face mask, safety glasses.

Preparation

2. Maintains fingernails short, rounded, and not extended beyond pad tips.
3. Places facemask and eyewear/face shield prior to procedure.
4. Removes rings or other jewelry as necessary.
5. Adjusts wristwatch upward on arm.

Washes Fingers, Hands, and Wrists

6. Adjusts water to a gentle flow.
7. Avoids contaminating uniform and hands by contact with sink.
8. Holds hands down toward sink.
9. Moistens hands, adds soap, and works up lather.
10. Uses friction and rotary motion to wash hands and fingers (ten strokes per surface).
11. Maintains lather.
12. Washes thumbs from base to tip.
13. Rinses under running water with friction without contacting sink (fingertips to wrist; do not let water run downward from wrist area to fingers).
14. Repeat washing procedure 2 more times.

Dries Fingers, Hands, and Wrists

15. Dries fingers, hands, wrists, with paper towels. Dry from fingertips to wrist.
16. Readjusts wristwatch to proper position and pull cuffs down

Critique Sink Area:

17. Maintains counter area free of splatter.
18. Discards used towels in basket or disposal without contaminating hands.

Glove Preparation:

19. Put your gloves on.
20. Maintains an up and away transfer position from sink to patient.

Glove Removal:

21. Remove gloves and discard.
22. Wash hands or use sanitizing rub.

PRE/POST APPOINTMENT PROCEDURES CHECKLIST

I. DETERMINE FUNCTIONING STATUS OF EQUIPMENT**A. Unit-(on)**

- _____ 1. handpiece
- _____ 2. air/water syringe
- _____ 3. suction attachments
- _____ 4. chair
- _____ 5. overhead light
- _____ 6. computer
- _____ 7. check for loose connections, arm joints, light attachment
- _____ 8. check water reservoir if applicable (if empty-refill with tap water, add tablet)

B. Sink/Waste Area

- _____ 1. water handle control
- _____ 2. foot peddle/door panel

C. Operator Stool

- _____ D. Untangle suction and handpiece hoses if needed

- _____ E. Computer and Eaglesoft login

- _____ F. Record any problems in the equipment maintenance log

II. SUPPLIES

- _____ A. Fill paper towel dispensers
- _____ B. Replace soap dispensers if empty
- _____ C. Stock supply drawer
- _____ D. Check trash (if half full do not replace-if replacing use utility gloves and PPE)

III. PRE-APPOINTMENT PROCEDURES (Prior to first appointment and between each appointment, wear mask, face shield, utility gloves)

- A. Inspect for cleanliness and clean if necessary with a paper towel dampened in water.
(add soap only for resistant residue and use very little)
- _____ 1. walls and cabinet fronts (inspect-wipe if needed)

- _____ 2. floor (inspect-wipe if needed)
- _____ 3. arm for overhead light and light handles
- _____ 4. dental chair and plastic cover, arm for suction attachments
- _____ 5. base of the unit
- _____ 6. mobile cart and operator stool
- _____ B. Clean Sink, counter areas and wipe the top of wall divider
- _____ C. Flush all water lines for 2 minutes at the beginning of the day and 30 seconds in between appointments if you have an older chair. If your chair is new and has a water reservoir, flush the line for 30 seconds prior to and after each appointment
- _____ D. Using hospital grade disinfectant, disinfect the following areas at beginning of each session. Between patient appointments only disinfect if surfaces are known to be contaminated or if barrier protection was compromised. Do not use disinfectants on vinyl chairs or overhead light covers (Use sanitizer when not treating a live patient-blue canister)
 - _____ 1. waste area/counters/ dental light handles and switch
 - _____ 2. Instrument tray, air/water syringe, handpiece attachments and control pad
 - _____ 3. operator and assistant stool adjustment handles
 - _____ 4. mobile cart
 - _____ 5. suction equipment and hoses, attachment clips
 - _____ 6. Ink pen for documentation, retractable eraser, red-blue dental charting pencil, bib clip

*At this point-wipe utility gloves with disinfectant, slide hands out and place in a drawer to dry. Sanitize or wash your hands and put clean exam gloves on.

- _____ E. Barrier protect the following items: (wear mask, face shield, clean exam gloves)
 - _____ 1. headrest
 - _____ 2. light handles and switch
 - _____ 3. air/water syringe and handpiece tray attachments, control pad and tray handles
 - _____ 4. suction equipment hoses and suction attachment arm-then suction attachments
 - _____ 5. operator stool handles
 - _____ 6. view box switch

- _____ 7. mobile cart top
- _____ 8. computer screen/ monitor
- _____ 9. pen, eraser, red/blue pencil (keep a separate uncovered pen on the counter)
- _____ F. Place a small cup on tray (use this cup for pre-rinse and then for disposable waste)
- _____ G. Set up equipment for procedures to be performed during the appointment (including patient bib and clip), position the chair for safe patient reception.
- _____ H. Instruments can be placed on the tray if gently squeezed out of the sterile bag. Do not touch the bag to the disinfected tray. Do not place a wrapped cassette on the tray. Place wrapped cassette on the disinfected counter until ready to use.

IV. POST-APPOINTMENT PROCEDURES (wear mask, face shield, utility gloves)

- _____ A. Remove all barrier protection (if **heavily** saturated with body fluids the barriers must go into the biohazard waste container located in the locked closet outside the treatment area)
- _____ B. Place all disposable waste into the trash
- _____ C. Inspect instruments (if heavily soiled take to central sterilization and scrub in the sink before giving them to the person on sterilization duty).

V. END OF SESSION PROCEDURES (wear mask, face shield, utility gloves)

- _____ A. Check all areas for cleanliness and clean with damp towels and soap if needed
- _____ B. Disinfect all equipment listed in III, D, as needed.
- _____ C. Clean evacuation system with approved solution as scheduled
- _____ D. Inspect saliva ejector valve and clean if necessary
- _____ E. Clean sink and counter area
- _____ F. Dispose of trash (only if ½ full) and replace bag
- _____ G. Raise the light to the highest position and the chair to approximately **1 foot** off the floor or tuck suction hoses up off of the floor to facilitate housekeeping services. Place foot pedal in a safe place, not directly under the chair.
- _____ H. Turn all equipment off except for computer. Log out of Eaglesoft, no patient information can be seen on the screen. Turn the computer monitor up facing the ceiling.
- _____ I. Water reservoir on chairs must be emptied and left upside down on a napkin to dry.
- _____ J. Assist other students when your unit is complete (required of everyone)

_____ K. Before leaving the clinic area, use clean utility gloves wash your face shield with soap and water, place lab coat in plastic bag and bring home for washing. (lab jackets are worn only once) Wipe your utility gloves with disinfectant and place aside to dry before storing.

VI. OTHER EQUIPMENT MANTAINENCE

_____ A. Check and clean “oil collection canister” and replace gauze as needed

_____ B. Clean HVE valves in ultrasonic cleaner and replace HVE filter as directed by an instructor

STUDENTS WILL PRE-OP THEIR OPERATORIES PRIOR TO THE START OF EACH LAB SESSION DURING PRE-CLINIC. YOU WILL PERFORM POST-OP PROCEDURES 15 MINUTES PRIOR TO DISMISSAL

LAB 2 Mathematical Principles and Anatomic Descriptors

Principles of positioning

Cumulative trauma injuries

Instrument Grasp

Preparation: (FPI) Modules 1, 2, and 3

Materials: Pre and post appointment checklist (use it every clinic until you remember)

PPE

Typodont and manikin

Instrument cassette #1

FPI

Objectives: At the completion of this lab you will be able to:

1. Demonstrate/describe the appropriate positioning of the dental unit/chair, clinician, and patient to enhance instrumentation procedures in each area of the mouth.
2. Define and list the symptoms of the following types of repetitive-strain disorder/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

3. Describe the elements of the neutral operator position.
4. Describe risk factors for repetitive strain injuries/disorders.
5. Demonstrate how the above cumulative trauma injuries may be prevented in dental hygiene practice.
6. Demonstrate exercises which might help prevent cumulative trauma injuries that you can perform during patient care, before patient care and after patient care.
7. Describe the criteria for proper glove fit.
8. Identify basic instrument parts.
9. Describe and demonstrate the modified pen grasp and the palm grasp.
10. Describe how errors in the grasp can decrease effectiveness and increase physical stress.
11. Describe/demonstrate methods to improve muscle strength.
12. Describe the mathematical principles and anatomic descriptors necessary to learn periodontal instrumentation.

Instructions: Instructors will assist and check pre-op procedures. Students will break into pods for group discussions. Instructors will demonstrate the proper position for the clinician, the patient, and equipment for all areas. Students will practice placing yourself, your equipment and typodont in the proper position for each area. You will also pair up and practice placing each other in the dental chair. You should be prepared to discuss repetitive strain injuries and practice exercises that are demonstrated by the instructors. Instructors will identify the basic parts of an instrument using the mirror and explorer. Instructors will demonstrate the modified pen and palm grasps and will assist each of you in achieving the correct grasp positions. Instructors will check the skill applications in FPI and answer any questions.

LAB 3 Instrument recirculation**Using the mirror****Mirror and finger rests in the anterior sextants**

Preparation: Wilkins Chapter 7

FPI Module 4 and 5

Materials: PPE

Typodont/Manikin

FPI

Cassette #1

Objectives: At the end of the lab session you will be able to:

1. Demonstrate the principles of instrument recirculation as accomplished in the hygiene clinic.
2. Describe the different types of dental mirrors and how they are used.
3. Demonstrate proper use of the mirror on the typodont.
4. Define fulcrum and describe the attributes of a properly placed fulcrum.
5. Identify errors in fulcrum placement and relate how instrumentation would be affected.
6. Demonstrate proper fulcrum placement in the maxillary and mandibular anterior

Instructions: Instructors will demonstrate procedures for instrument recirculation. Students not involved with instrument recirculation will continue to practice positioning around the typodont. Instructors will discuss using the mouth mirror on the typodont while demonstrating the maxillary and mandibular anterior mirror and instrument finger rests/fulcrums. You will practice anterior fulcrums with a mirror in the non-dominant hand and a mirror handle without the mirror in the dominant hand. Complete areas 1 and 2 in the maxillary and mandibular positioning skill evaluations.

LAB 4 **Mirror and finger rests in mandibular posterior sextants****Mirror and finger rests in maxillary posterior sextants****Emergency equipment****Location of supplies/sterilization duty.**

Preparation: DHYG 1431 Manual

Fundamentals of Periodontal Instrumentation Modules 6 and 7

Materials: PPE

Fundamentals of Periodontal InstrumentationTypodontManikin2 mirrors and handles

Objectives: At the end of the lab session you will be able to:

1. Identify errors in fulcrum placement and relate how instrumentation would be affected.
2. Demonstrate proper fulcrum placement in the maxillary posterior sextants.
3. Demonstrate proper fulcrum placement on the mandibular posterior sextants.
4. Locate emergency equipment in the clinic area.
5. Demonstrate proper use of the mirror in all areas on the typodont

Instructions: Properly prepare your unit with a typodont. Instructors will discuss using the mouth mirror while demonstrating the maxillary and mandibular posterior mirror and instrument finger rests/fulcrums. You will practice the fulcrums with a mirror in the non-dominant hand and a mirror handle without the mirror in the dominant hand. Students will be shown how to find emergency equipment. Students will complete the maxillary and mandibular positioning, and anterior sextant mirror and finger rest skill evaluations.

LAB 5 Technique Essentials:
Movement and Orientation to the Tooth Surface
Adaptation

Preparation: (FPI) 9 and 10

Materials: Typodont/chair mount

 Instrument Cassette #1

 Plastic test strip

Objectives: At the end of the lab session 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.
3. State the correct working angulation and describe/demonstrate how to clinically determine if the correct angulation is obtained.
4. Describe and demonstrate two techniques used to move the working end of the instrument.
5. Describe and demonstrate techniques to maintain instrument adaptation throughout the instrument stroke.

Instructions: Lab will start with students pairing up. The “operator” will receive and seat the “patient” in the dental chair, adjust it correctly and demonstrate proper maxillary and mandibular fulcrum placement in all areas and complete the corresponding skill evaluations. After break, instructors will discuss and demonstrate instrument adaptation, angulation and activation. With instructor assistance, students will demonstrate the skill building activities found in the modules. The remainder of the lab session will be spent practicing previously learned skills.

LAB 6 Instrumentation Strokes**11/12 Explorer**

Preparation: FPI 11 and 13

Materials: PPE

 Typodont/chair mount

 Instrument cassette #1

Objectives: At the end of the lab session you will be able to:

1. Identify the elements of the grasp, fulcrum and instrument stroke that work towards achieving stability during the activation of an instrument.
2. State the correct working angulation and describe/demonstrate how to clinically determine if the correct angulation is being used for the ODU 11/12 explorer.
3. Combine knowledge of the following to describe how to activate an assessment stroke.
 - a. grasp
 - b. fulcrum
 - c. adaptation
 - d. angulation
 - e. lateral pressure
 - f. stroke direction
 - g. stroke length
 - h. combined hand, wrist, arm motions
 - i. stroke completion
4. Demonstrate correct use of the ODU 11/12 explorer on the typodont.
5. Identify errors and describe their consequences in the following elements of the assessment stroke:
 - a. grasp
 - b. fulcrum
 - c. adaptation
 - d. angulation
 - e. lateral pressure
 - f. combined hand, wrist, arm motion

LAB 7 Health histories

Preparation: (PAT) Modules 1 – 7

Wilkins Ch-11

***Each student will obtain and complete their own health history form **PRIOR** to lab. **Do not** provide any follow-up to your basic answers until asked to do so by your clinic partner.

Materials:

Completed health history, no follow-up

Patient volunteer

Cassette #1

Objectives: At the end of the lab session you will be able to:

1. Identify the rationale for questions on the health history and provide appropriate follow-up questions for positive responses.
2. Given certain circumstances determine the need for medical consultation prior to dental treatment.
3. Identify patients who might need prophylactic antibiotic coverage prior to dental hygiene care.
4. State examples of how oral health can be an indication of systemic disease.

Instructions: **Properly prepared cubicle for intraoral practice.** Lab will start with an activity designed to help each student identify essential health history information and to demonstrate techniques to obtain appropriate information from the patient. After, students will pair up and obtaining a complete medical/dental history on each other. This will include the “operator” receiving and seating the “patient” in the dental chair and asking follow-up questions to complete the questionnaire form. Students will practice with the explorer during the rest of the session.

Lab 8 Vital signs**Sickle Scalers**

Preparation: Patient Assessment Tutorials (PAT) Modules 8 – 10

Fundamentals of Periodontal Instrumentation (FPI) Module 14-15

Review lecture notes and assigned reading material

Materials:

Cassette #1

Clock

Stethoscope and sphygmomanometer

Completed health history

Typodont/Manikin

Objectives: At the end of the lab session you will be able to:

1. Describe the components of a blood pressure recording and how errors in blood pressure measurement due to the auscultatory gap can occur; explain how these errors can be avoided.
2. Identify and categorize normal and abnormal vital sign values.
3. Properly demonstrate the procedures involved in taking vital signs on your patient/partner.
4. Determine the correct working end of the instruments.

 State the correct working angulation and describe/demonstrate how to clinically determine if the correct angulation is being used for sickle scalers.
5. Identify the elements of instrumentation that work towards achieving stability during the activation of an instrument.
6. Combine knowledge of the following to describe how to activate a calculus removal stroke.
 - a. grasp
 - b. fulcrum
 - c. fulcrum
 - d. fulcrum
 - e. fulcrum
 - f. stroke direction
 - g. stroke length

- c. adaptation
 - d. angulation
 - e. lateral pressure
 - h. combined hand, wrist, arm motions
 - i. stroke completion
7. Demonstrate correct use of the sickle scalers on the typodont.
8. Identify errors and describe their consequences in the following elements of instrumentation:
- a. grasp
 - b. fulcrum
 - c. adaptation
 - d. angulation
 - e. lateral pressure
 - f. combined hand, wrist, arm motion

Instructions: Lab will start with students pairing up and obtaining a complete medical/dental history on each other. This will include the “operator” receiving and seating the “patient” in the dental chair and asking follow-up questions to complete the questionnaire form. Vital signs will be done to complete the health history. Instructors will demonstrate the calculus removal stroke on the typodonts and how to use the sickle scalers throughout the mouth. Students should review the design characteristics of the sickle scalers while they are practicing using the instruments.

Lab 9 Universal Curet

Preparation: Fundamentals of Periodontal Instrumentation Module 16-17

DHYG 1431 manual

Materials: PPE

Typodont/Manikin

Cassette #1

Objectives: At the end of the lab session you will be able to:

1. Determine the correct working end of the instruments.

State the correct working angulation and describe/demonstrate how to clinically determine if the correct angulation is being used for universal curets.
2. Identify the elements of instrumentation that work towards achieving stability during the activation of an instrument.
3. Combine knowledge of the following to describe how to activate a calculus removal stroke.
 - a. grasp
 - b. fulcrum
 - c. adaptation
 - d. angulation
 - e. lateral pressure
 - f. stroke direction
 - g. stroke length
 - h. combined hand, wrist, arm motions
 - i. stroke completion
4. Demonstrate correct use of the universal curets on the typodont.
5. Identify errors and describe their consequences in the following elements of instrumentation:
 - a. grasp
 - b. fulcrum
 - c. adaptation
 - d. angulation
 - e. lateral pressure
 - f. combined hand, wrist, arm motion

Instructions: Instructors will demonstrate the calculus removal stroke. Students should review the design characteristics of the universal curets as they are practicing with these instruments.

LAB 10 Intraoral use of the probe

Preparation: Fundamentals of Periodontal Instrumentation Module 12

Video

Sterilize cassette with instruments

Materials: PPE

Fundamentals of Periodontal Instrumentation

DHYG 1431 manual

Your dental record

Objectives: At the end of the lab session you will be able to:

1. State the correct working angulation and describe/demonstrate how to clinically determine if the correct angulation is being used for the probe.
2. Combine knowledge of the following to describe how to activate a walking stroke with the probe.
 - a. grasp
 - b. fulcrum
 - c. adaptation
 - d. angulation
 - e. lateral pressure
 - f. stroke direction
 - g. stroke length
 - h. combined hand, wrist, arm motions
 - i. stroke completion
3. Demonstrate correct use of the probe intraorally.

Instructions: Instructors will demonstrate the correct use of the probe in all areas. Students will demonstrate proper use of the probe in specified areas. You will practice with the probe and the explorer in all areas of the mouth.

LAB 11 Head and Neck Examination
Intraoral practice with Probe and Explorer

Preparation: Review lecture notes and assignments

Patient Assessment Tutorials Modules 11, 12

Fundamentals of Periodontal Instrumentation Modules 12, 13

Materials: PPE

Patient Assessment Tutorials

Fundamentals of Periodontal Instrumentation

DHYG 1431 manual

Your dental record

Pre-rinse

Both instrument cassettes (sterilized)

Objectives: At the end of the lab session you will be able to:

1. Identify the characteristics to observe in assessing a patient's general appearance and state why they may be significant to treatment.
2. Identify all of the structures to be examined on your patient/partner in lab.
3. Describe and demonstrate the methods of examining each structure in the head and neck examination.
4. Identify and name common deviations from normal that may be detected during the examination.
5. Describe abnormal/atypical lesions, using correct terminology, according to location, history and clinical characteristics.

Instructions: During the lab, you will pair up, update medical/dental histories, take vital signs and perform a head and neck examination on your partner. You will follow the procedures outlined in the lecture. Instructors will assist with the head and neck examinations. Findings from the head and neck examination will be recorded on an examination form. You will continue to practice with the explorer and probe.

LAB 12 **Midterm practical (pre-post operatory procedure competency) and
written examination (instrument identification)**

Preparation: Review all materials related to instrument design and classification and the pre and post appointment procedures competency evaluation, page 48 this manual. The exam and competency will be completed during Lab 13.

Materials: PPE
 Typodont
 Pen or pencil

Instructions: Instructions will be discussed prior to the lab session.

Lab 13 Intraoral examination
All instruments

Preparation: Review lecture notes and assignments on intraoral examinations
Patient Assessment Tutorials Module 13

Materials: PPE
Patient Assessment Tutorials
DHYG 1431 manual

Sterile instrument cassettes with all instruments

Sterile gauze, cotton tip applicator, pre-rinse

Your dental record

Objectives: At the end of the lab session you will be able to:

1. Identify all of the oral structures to be examined on your patient/partner in lab.
2. Describe and demonstrate the methods of examining each structure in the intraoral examination.
3. Identify and name common deviations from normal that may be detected during the examination.
4. Describe abnormal/atypical lesions, using correct terminology, according to location, history and clinical characteristics.
5. Describe the different occlusal classifications and determine your patient/partner's occlusal classification.

Instructions: Instructors will demonstrate intra oral examination procedures. You will practice these procedures for about half of the lab session. The other half of the session will be spent practicing the intraoral use of instruments. Please arrange your instruments so you have a complete set in each cassette, follow the arrangement instructions in the lab manual.

YOU WILL WORK ON EACH OTHER FOR SPECIFIC LABS FOR THE REST OF THE SEMESTER. ALL STANDARD PRECAUTIONS WILL BE FOLLOWED. MAKE SURE YOUR PATIENT RINSES WITH MOUTH RINSE PRIOR TO ANY INTRAORAL PROCEDURE.

LAB 14 Patient simulation

Head and Neck examination

Drug cards*

Recent radiographs will be required for this and all subsequent lab sessions

Preparation: Review all appropriate lecture and lab materials

Update the medical/dental history

If you are taking medicines you will need to complete a drug card for each one and hand them to the instructor when she is checking your medical history.

Review Patient Assessment Tutorials instructions for head and neck and intraoral examinations

Materials: Fundamentals of Periodontal Instrumentation

Patient Assessment Tutorials

*Sterile instrument cassettes with a full complement of instruments in each***

*All necessary disposables***

*Patient record with appropriate forms***

*Blank Clinical Evaluation Record (CER) ***

Drug cards for each prescription medication

Objectives: At the end of the lab session you will be able to:

1. Identify the characteristics to observe in assessing a patient's general appearance and state why these may be significant to treatment.
2. Identify all of the structures to be examined on your patient/partner in lab.
3. Describe and demonstrate the methods of examining each structure in the extra intra oral examination.
4. Identify and name common deviations from normal that may be detected during the examination.

5. Use correct terminology to describe abnormal/atypical lesions according to location, history and clinical characteristics.

Instructions: You will complete all paper work and present it to the instructor for signature prior to beginning the head and neck examination. The instructors will watch you while you perform the examination and evaluate your performance. You will use extra time to practice positioning and work with the explorer and probe on your patient/partner.

- * Each person is responsible for completing their own drug cards if they are taking medications. Make sure these are completed prior to lab!**
- ** This material will be required every session and will not be listed again.**

LAB 15 Patient simulation
Intraoral examination

Preparation: Review all appropriate lecture and lab materials
Update the medical/dental history
Pre-op unit for patient reception including all necessary disposables
Review Patient Assessment Tutorials instructions for head and neck and intraoral examinations

Materials: Patient Assessment Tutorials
Fundamentals of Periodontal Instrumentation

Objectives: At the end of the lab session you will be able to:

1. Identify the characteristics to observe in assessing a patient's general appearance and state why they may be significant to treatment.
2. Identify all of the extra and intraoral structures to be examined on your patient/partner in lab.
3. Describe and demonstrate the methods of examining each structure in the extra and intraoral examination.
4. Identify and name common deviations from normal that may be detected during the examination.
5. Use correct terminology to describe abnormal/atypical lesions according to location, history and clinical characteristics.

Instructions: You will complete the history review and present to the instructor for signature prior to beginning the intraoral examination. The instructors will watch you while you perform the examination and evaluate your performance. You will use any extra time to practice positioning and work with the mirror, explorer and probe on your patient/partner.

LAB 16 Patient Simulation**Dental charting****Transillumination****Using the air/water syringe**Preparation: Fundamentals of Periodontal InstrumentationPatient Assessment Tutorials

DHYG 1431 Manual, Dental Charting Guide

Materials: Fundamentals of Periodontal InstrumentationPatient Assessment Tutorials

DHYG 1431 manual

Red and blue pencil

Eraser

Objectives: At the end of the lab session you will be able to:

1. Given a variety of carious lesions or restorations, identify the proper classification number using G. V. Black's classification system.
2. Demonstrate proper use of the #23 explorer and transillumination to detect caries.
3. Identify and chart all restorations and findings on their partner by following the dental charting guide.
4. Determine and record occlusal classifications.
5. Use proper terminology to describe all charted findings.
6. Describe the purpose of the air syringe.
7. Explain the procedure for using the air syringe.
8. Describe improper use of the air syringe.

Instructions: Instructors will demonstrate the use of the explorer for caries detection as well as transillumination. The correct use of the air/water syringe will also be demonstrated. Each student will determine their partner's occlusal classification and then complete dental charting. Use the charting symbols from the dental charting guide to record the findings.

Lab 17 Patient simulation**Periodontal Charting****Probe**

Preparation: Review all appropriate lecture and lab materials

Review the outline for periodontal assessment

Patient Assessment Tutorials

Fundamentals of Periodontal Instrumentation

Materials: Fundamentals of Periodontal Instrumentation

Patient Assessment Tutorials

Patient record with appropriate forms

Pen, red and blue pencil and eraser

Objectives: At the end of the lab session you will be able to:

1. Use correct terminology to describe the clinical appearance of the gingiva in health and disease.
2. Examine and evaluate specific examples of clinical characteristics to differentiate between gingival and periodontal disease.
3. Evaluate the significance of bleeding as a sign of gingival inflammation.
4. Demonstrate the techniques involved in periodontal assessment and charting on a patient/partner in lab.
5. Quantify the amount of dental biofilm observed in your patient/partner's mouth as slight, moderate or heavy and determine if it is localized or generalized in distribution.
6. Visually identify areas of dental biofilm accumulation and associate with any dental biofilm retentive factors present.
7. Identify systemic factors that might predispose or contribute to dental biofilm accumulation.
8. Demonstrate proper use of the probe to determine pocket depths and tissue heights.

Instructions: Instructors will demonstrate techniques for assessing and recording the gingival/periodontal status of the patient. You will update the medical/dental history and then complete the soft tissue examination.

PERIODONTAL ASSESSMENT

General Management:

- Use a systematic procedure.
- Maintain proper patient/operator positioning.
- Use equipment and instruments to aid in examination.
- Maintain proper infection control procedures.

Determines possible etiology for gingival/periodontal condition:

- Determine the presence of plaque and any plaque retentive features that contribute to accumulation.
- Determine the presence of any predisposing factors that would affect the degree of disease present.
- Record findings accurately, noting etiology for positive findings.

Visually examine the gingival tissue for the following and notes on the examination form:

- Architecture
- Color
- Consistency
- Surface texture
- Shape of the margins and papillae

Determine presence of gingival or periodontal pockets, record tissue height (position of gingival margin or recession) and bleeding points:

- Pre-Clinic - probe all pocket depths and records 4mm and above findings.
- Probe for the location of the gingival margin in relationship to the CEJ. Note the readings in the box marked G.M. (height/ level of gingival margin) *****REMEMBER** when the gingival margin is apical to the CEJ the numbers are circled to distinguish them from those readings where the gingival margin is coronal to the CEJ. For this lab session you will be recording areas of recession only.
- While probing, determine the presence of bleeding and note by placing a red dot above the area in the pocket depths box.
- Write a general statement in the box under Soft Tissue Examination to describe your findings relative to probe depths and bleeding points.
- Determines bleeding score and records in the appropriate area on the assessment form.

Examine for the presence of exudates (suppuration)

- Palpate or visually detects any sign of exudates. Notes areas of suppuration while probing.
- The presence of any exudates (suppuration) would be recorded at this time in the soft tissue findings area.

Describe Radiographic Findings:

- Examine radiographs for the listed abnormalities; note the areas by checking the boxes and note specific teeth in the areas by writing the numbers in the description box.
- Visible caries
- Use this time to double check your dental chart for the appropriate restorations, etc.

Determine plaque score and reports exam results to instructor:

- Properly determine the patient's oral hygiene index **any time after the assigned instructor has checked the soft tissue examination portion of the examination!**
- Verbally present findings to instructor using appropriate dental terminology.

Determine general gingival/periodontal condition: (This is done after dental charting is been completed)

- Correlate radiographic findings with gingival and periodontal findings.
- Record the LIT periodontal case and complete the checklist in this section describing the conditions of the periodontal tissues.

Lab 18 **Patient simulation**
 Periodontal assessment

 Plaque index

 Bleeding score

 Probe

 Tooth brushing technique

Preparation: Review all appropriate lecture and lab materials

Update the medical/dental history

Materials: Fundamentals of Periodontal Instrumentation

Patient Assessment Tutorials

All necessary disposables

Disclosing solution

Calculator

Pen, red and blue pencil and eraser

Patient's toothbrush and floss

Ziploc bag-store dry brush inside

Objectives: At the end of the lab session you will be able to:

1. Demonstrate how to correctly use a mirror, explorer and probe in the mouth.
2. Determine the Plaque index and bleeding score for your partner/ patient
3. Write a description of a patient's brushing technique
4. List radiographic changes that may indicate the presence of periodontal disease.
5. Given a list of clinical changes in the gingival tissues, determine the gingival/periodontal status and check off the appropriate area on the form.

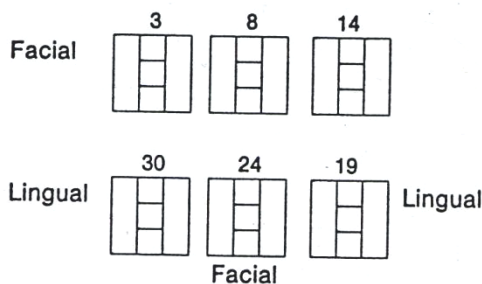
Instructions: Update the medical/dental history prior to any treatment. Disclose the teeth and obtain the plaque index. Ask your patient/partner to demonstrate their current method of brushing and flossing and provide a written description on the plaque index form. Students will probe the maxillary right quadrant and record pocket depths, recession and bleeding points All of this information will be recorded in the proper area on the indices form.

PATIENT HYGIENE PERFORMANCE INDEX (PHP)

PODSHADLEY AND HALEY

The purpose of the PHP is to assess the extent of dental biofilm and debris over a tooth surface. Debris is defined as soft foreign material consisting of dental biofilm, material alba, and food debris that are loosely attached to tooth surfaces. The representative teeth used to compute the PHP surfaces. The representative teeth used to compute the PHP include 3, 8, 14, 19, 24 and 30. * If any of the posterior teeth is missing or severely decayed, the next tooth distal to the designated tooth is assessed. If either of the anterior teeth is missing, the incisor on the opposite side of the midline is selected.

1. The teeth are disclosed for 30 seconds. Patients should **not** rinse their mouths out. Examinations should be made with a mouth mirror.
2. Look for staining that indicates plaque and color in the appropriate boxes
3. Count the total # of colored boxes
4. Divide the total # by 6



Each of the subdivisions is scored for the presence of stained debris. Example: 10 /6

10 colored boxes divided by 6=1.6

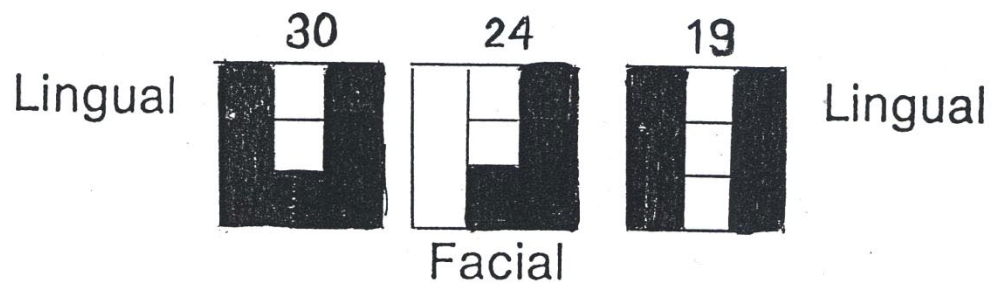
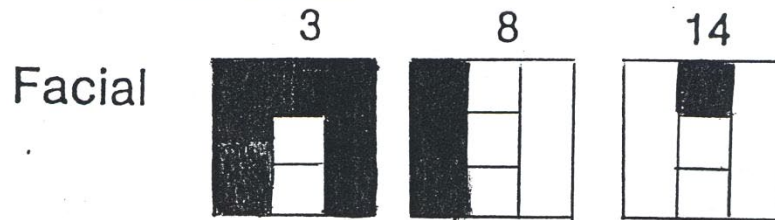
A score of 1.6 is rated as **Good**

The division of the tooth surface is an important element of the PHP because it enables the examiner to evaluate oral hygiene procedures such as brushing and flossing through changes in the presence of gingival and interproximal dental biofilm.

RATING	SCORES
Excellent	0 no biofilm
Good	0.1 - 1.7
Fair	1.8 - 3.4
Poor	3.5 - 5.0

EXAMPLE: PLEASE COMPUTE THE PHP FOR THE FOLLOWING SITUATION:

Date _____



Plaque Score _____

BLEEDING SCORE

The bleeding score is calculated using the number of actual bleeding points divided by the number of possible bleeding points.

Count the number of teeth present and multiply x 6

Why 6? Because 6 is the number of possible bleeding points for each tooth.

Example:

The patient has 28 teeth or a possible 168 bleeding points (28 times 6).

He has 22 actual bleeding points recorded on the periodontal assessment form.

5. Divide 22 by 168---- $22/168=.13$
6. 16 changed to a %=13%
7. The recorded Bleeding score is 13%
8. *There is no rating for a bleeding score, simply record the percentage on the plaque score form.

Lab 19 Patient simulation
Periodontal Assessment Complete

Preparation: Review all appropriate lecture and lab materials

Fundamentals of Periodontal Instrumentation

Update the medical/dental history

Materials: Fundamentals of Periodontal Instrumentation

Patient record with appropriate forms

Pen, red and blue pencil and eraser

Objectives: At the end of the lab session you will be able to:

1. Demonstrate the techniques involved in periodontal charting on a patient/partner in lab.
2. Record the findings of the periodontal examination correctly. This is done on the dental charting form.

Instructions: You will update the medical/dental history prior to any treatment. You will complete the periodontal charting by recording probed pocket depths of 4mm or more. The Gingival margin is measured in distance from the CEJ and recorded. If the patient has a 4mm pocket, you will calculate the CAL. Any bleeding is recorded as a red dot above the pocket depth. Instructors will check select quadrants. On the back of the form you must also check for inadequate zone of attached gingiva, frenum involvement, furcation, sensitivity suppuration, and mobility While you are waiting for a check or after you have completed the quadrant, you will practice with the explorer. Instructors will be available for assistance with instrumentation techniques.

PERIODONTAL CHARTING

The student will have radiographs available for this examination.

GENERAL MANAGEMENT:

1. Use a systematic procedure.
2. Maintain proper patient/operator positioning.
3. Use equipment and instruments to aid in examination.
4. Maintain standard precautions.

PROBED POCKET DEPTHS:

5. Follow accepted procedures, record in P.D. boxes.

LEVEL OF GINGIVAL MARGIN:

6. Follow accepted procedures, record in G.M. boxes.

CLINICAL ATTACHMENT LEVEL:

7. If the gingival margin is coronal to the CEJ, the reading must be subtracted from the pocket depth, if the gingival margin is apical to the CEJ than the readings are added. Record these numbers in the boxes marked C.A.L.

INADEQUATE ZONE OF ATTACHED GINGIVA:

8. Place the probe over the surface of the gingiva, measure from the gingival margin to the mucogingival junction. This measurement represents the total width of the gingiva. Subtract the probed pocket depth from this measurement, if less than 1mm, chart as inadequate by placing an "I" in one portion of the box marked P. C. (periodontal charting).

FRENUM INVOLVEMENT:

9. Ascertain level of frenal attachment by gently pulling mucosa away from teeth. Observes free gingival movement when frenum is pulled, if present, chart as an abnormal frenal attachment, a red "F" in the affected area.

FURCATION INVOLVEMENT:

10. Insert curved or pigtail explorer or Nabors probe into suspect furcation area and determine degree of involvement. Chart as follows:
 - **Class I** – contours of furcation area can be distinguished by moving probe from side to side. Chart as Λ in red at the affected site.
 - **Class II** – probe enters furcation but does not pass through. Chart as Δ in red at the

- affected site.
- **Class III** – probe passes between the roots and through the entire furcation area. Chart as ▲ in red at the affected site.
 - **Class IV** – same as class III, however, there is gingival recession with exposure of the furcation. Chart as u in red at the affected site.

SENSITIVITY:

11. Tap on the developmental lobes of each tooth to determine sensitivity to percussion, if found, record the letter “P” in one portion of the box marked P. C.

TOOTH MOBILITY:

12. Use two mirror handles to determine tooth mobility. Apply the blunt ends of the instruments to opposite sides of the tooth and rock the tooth to test horizontal mobility. Test vertical mobility by applying vertical pressure on the occlusal or incisal surfaces of the teeth with the blunt end of one of the mirror handles. Record mobility classification as a 1, 2, or 3 in one portion of the box marked P.C.

SUPPURATION:

13. Note and record while probing or press with pad of finger over suspected area and note presence of suppuration. Record the letter “S” in the box marked P.C.

DENTAL ANOMALIES, RESTORATIONS, ETC:

14. Student is able to verbally express how elements of the dentition can/do adversely affect periodontal health.
15. Verbally present findings to instructor using appropriate clinical dental terminology.

Lab 20 Calculus Detection

Preparation: Fundamentals of Periodontal Instrumentation Module 13

Materials: Fundamentals of Periodontal Instrumentation

Typodont-manikin

Cassette #1

You will clean and disinfect your unit. No barriers or suction tips will be placed

Objectives: At the end of the lab session you will be able to:

1. Chart calculus detected on the appropriate form.

Instructions: Instructors will review calculus detection concepts, students will calculus chart the maxillary right and mandibular right quadrants and record their findings on the appropriate form.

Lab 21 **Patient simulation**
 Periodontal debridement

 Calculus detection

Preparation: Fundamentals of Periodontal Instrumentation Modules 14,16

Review all appropriate lecture and lab materials

Materials: Typodont-manikin

Cassette #1

Clean and disinfect your unit. No barriers or suction tips will be placed

Objectives: At the end of the lab session you will be able to:

1. Demonstrate correct use of the following instruments.
 - a. explorers
 - b. anterior and posterior sickles
 - c. universal curets

2. Identify errors and describe their consequences in the following elements of instrumentation:
 - a. grasp
 - b. fulcrum
 - c. adaptation
 - d. angulation
 - e. lateral pressure
 - f. combined hand, wrist, arm motion

3. Determine which type of hand instrument and which instrument design is most appropriate to use based on the type and location of deposits.

Instructions: You will start calculus removal in the maxillary right and maxillary left quadrants. When these quadrants are completed or if there is no calculus the student will calculus chart the mandibular left and mandibular right quadrants. Instructors will be available for assistance with instrumentation.

Lab 22 Patient simulation
Periodontal debridement

Preparation: Fundamentals of Periodontal Instrumentation
Review all appropriate lecture and lab materials
Update the medical/dental history

Materials: Fundamentals of Periodontal Instrumentation
Typodont-manikin
Cassette #1
Clean and disinfect your unit

Objectives: At the end of the lab session you will be able to:

1. 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. Gracey curets
2. Identify errors and describe their consequences in the following elements of instrumentation:

a. grasp	d. angulation
b. fulcrum	e. lateral pressure
c. adaptation	f. combined hand, wrist, arm motion
3. Determine which type of hand instrument and which instrument design is most appropriate to use based on the type and location of deposits.

Instructions: Students will continue calculus removal with the appropriate instruments in each quadrant. Instructors will check each quadrant upon completion. Instructors will be available for assistance with instrumentation.

Lab 23 Patient simulation
Periodontal debridement

Preparation: Review all appropriate lecture and lab materials.

Materials: Fundamentals of Periodontal Instrumentation

Cassette #2

Typodont-manikin

Calculus detection form

Objectives: At the end of the lab session you will be able to:

1. Demonstrate correct use of the following instruments on the typodont and in the mouth:
 - a. explorers
 - b. anterior and posterior sickles
 - c. universal curets

2. Identify errors and describe their consequences in the following elements of instrumentation:

a. grasp	d. angulation
b. fulcrum	e. lateral pressure
c. adaptation	f. combined hand, wrist, arm motion

3. Determine which type of hand instrument and which instrument design is most appropriate to use based on the type and location of deposits.

Instructions: Students will place typodonts and manikins on the chairs. Next, students will continue calculus detection and periodontal debridement on the typodonts. Some of you may complete your last quadrant of scaling. Instructors will check the quadrants when completed. Spend extra time practicing the areas designated for the final practical exam.

Lab 24 Patient simulation
Periodontal debridement

Preparation: Review all appropriate lecture and lab materials

Materials: Fundamentals of Periodontal Instrumentation

Cassette #1

Typodont-manikin

Objectives: At the end of the lab session you will be able to:

1. Demonstrate correct use of the following instruments on the typodont and in the mouth:
 - a. mirror
 - b. explorer
 - b. anterior and posterior sickles
 - c. universal curets

2. Identify errors and describe their consequences in the following elements of instrumentation:

a. grasp	d. angulation
b. fulcrum	e. lateral pressure
c. adaptation	f. combined hand, wrist, arm motion

3. Determine which type of hand instrument and which instrument design is most appropriate to use based on the type and location of deposits.

Instructions: Students will continue calculus removal with the appropriate instruments in each quadrant. Instructors will check each quadrant upon completion. Instructors will be available for assistance with instrumentation.

Lab 25 Patient simulation
Plaque free/Stain removal
Fluoride

Preparation: Fundamentals of Periodontal Instrumentation,
Review all appropriate lecture and lab materials
DHYG 1431 Lab Manual pages 44-46

Materials: Fundamentals of Periodontal Instrumentation
Typodont-manikin (with drain tube)
Handpiece
Prophy angle
Prophy paste
All necessary disposables including gauze and floss, small suction tip
Disclosing solution (not to be used on typodonts)
Fluoride and appropriate trays

Objectives: At the end of the lab session you will be able to:

1. Identify instances when polishing is indicated.
2. Demonstrate selective polishing on your typodont in the lab.
3. Determine the correct fluoride for use
4. Demonstrate the tray technique for the application of fluoride gels on your typodont

Instructions: Instructors will demonstrate dental biofilm/stain removal and fluoride tray application techniques using a typodont. You will determine which type of paste should be used on your typodont for dental biofilm and/or stain removal and will then polish the typodont teeth. After the procedure you will floss and determine if the patient is dental biofilm free. Disclosing solution will not be used on typodonts. Instructors will check procedure and end product.

CLEANSING AND POLISHING**PREPARATION:**

1. Set up all equipment and check instrument operation prior to seating the patient. The
Note: student will disclose the patient prior to and after polishing.

GENERAL MANAGEMENT:

2. Use a systematic procedure.
3. Use mirror effectively.
4. Use air and evacuation equipment effectively.
5. Utilize light effectively to aid instrumentation.
6. Maintain correct patient/operator positioning.
7. Maintain proper infection control procedures.

GRASP:

8. Hold hand piece with the pads of the index finger, thumb and middle finger.
9. Support the weight of the hand piece proximal to the "V" of the hand or distal to the third knuckle of the index finger.
10. Maintain contact between the elements of the grasp as much as possible to avoid operator fatigue.
11. Use as relaxed a grasp as possible.

FULCRUM:

12. Establish on stable area, extended, cross arch and extra oral may be necessary to provide access and operator comfort.
13. Maintain stable, constant pressure.

INSTRUMENT POSITIONING AND ACTIVATION:

14. Obtain correct paste and apply to teeth.
15. Direct cup toward the occlusal surface to flare edge of cup into sulcular and proximal areas (especially on lingual).
16. Maintain constant slow speed of angle.
17. Continually moves cup on tooth.

18. Use combination or roll/sweep stroke.
19. Adapt edge of cup in anterior (fossae).
20. Use overlapping strokes and light to medium pressure to effectively remove entire deposit.
21. Use correct wrist/arm/hand motion to produce the desired stroke.
22. Debride polishing cup of saliva before refilling.

USE OF AUXILIARY POLISHING INSTRUMENTS:

23. Adapt finishing strips to interproximal areas if indicated.
24. Adapt tape/floss to proximal surfaces.

EVALUATION:

25. 1- leaves no more than 4 surfaces with stain or dental biofilm; ½- leaves no more than 6 surfaces with stain or dental biofilm: 0-leaves more than 7 surfaces with stain or dental biofilm.

FLUORIDE TREATMENT**Prepare Teeth:**

1. Determine dental biofilm-free condition by disclosing.

Patient Positioning:

2. Places chair in upright position.
3. Instructs patient not to swallow during procedure.

Tray Technique with APF or Neutral Sodium Fluoride - Assemble Equipment:

4. Selects appropriate tray size.
5. Obtains fluoride gel.
6. Obtains saliva ejector and gauze.

Application Procedure:

7. Places fluoride in trays.
8. Inserts saliva ejector in region of canine.
9. Dries mandibular dentition with compressed air.
10. Retracts buccal mucosa with fingers to maintain dry area.
11. Removes saliva ejector to place mandibular tray.
12. Places tray (when doing entire mouth, place the mandibular tray first).
13. Replace saliva ejector once tray has been positioned.
14. Dries maxillary dentition in above manner.
15. Places maxillary tray and has patient close arches.
16. Maintains tray in mouth for 4 minutes.
17. Removes saliva ejector.

18. Removes tray(s), placing them into biohazardous waste.
19. Has patient expectorate into the HVE cup.
20. Removes excess fluoride from teeth with gauze.
21. Instructs patient not to eat, during, rinse or brush for 30 minutes

FLUORIDE SAFETY

1. Use only approved FL preparations
2. Use only recommended amounts and methods of delivery
3. Know potential toxicity of products and be prepared to render emergency treatment
4. Instruct patients in how to safely store home products
 - a. **DO NOT** store large amounts at home (Prescriptions contain no more than 264 mg)
 - b. Children should have parental supervision during the use of fluoride at home (Rinses should not be routinely prescribed for children under the age of 6)
 - c. Child Proof Covers/Caps, containers kept out of reach of small children and others who may not understand dosage limits. **Remember, Tablets taste good!!!!**
5. **Certainly Lethal Dose (CLD)**
 - a. Adult 5-10 G taken at one time
 - b. Child varies according to weight .5 - 1 G
6. **Safely Tolerated Dose (STD)**
 - a. Adult 1.25 G - 2.5 G
 - b. Child varies with weight 1 G 12 years and younger, 500 mg under 6 years
7. Symptoms of acute toxicity begin in 30 minutes, may last 24 hours
 - a. Nausea, vomiting, diarrhea
 - b. Abdominal pain
 - c. Salivation, thirst
 - d. Has systemic complications which will lead to death in a few hours from cardiac failure or respiratory paralysis
8. **Emergency Treatment:**
 - a. Induce vomiting either mechanically (IPECAC)
 - b. Call 911 or emergency
 - c. Administer FL binding liquid when not vomiting
 1. Milk

2. Lime water (CaOH_2 solution 0.15%)
- d. Provide basic life support until paramedics arrive

ONE PINT (16 OZ.) OF FL CONTAINS FROM 4 TO 5 GRAMS OF FL ION, WHICH IS A LETHAL DOSE FOR MOST ADULTS AND ALL CHILDREN NEVER LEAVE FLUORIDE WHERE CHILDREN CAN GET AT IT! REMEMBER, SOME CHILDREN WILL ACTUALLY LIKE THE TASTE!

FACTORS TO TEACH PATIENT DURING (BEFORE) FL TREATMENT

1. Instruct not to eat, drink, brush, rinse, etc. for 30 minutes after FL treatment
2. Explain role of FL in remineralization
3. Explain role of FL in reducing demineralization
4. Explain that FL treatment will help replace FL lost during polishing, if done.

Lab 26

Patient simulation

Comprehensive Care

Preparation: Review all laboratory information covering PPE, infection control, operator and patient positioning, patient assessment exams, and instrumentation techniques.

Materials: PPE

Patient Assessment Tutorials

DHYG 1431 manual

Sterile instrument cassettes with all instruments

Sterile gauze, cotton tip applicator, pre-rinse

Your dental record

Final Instrumentation Practical

Preparation: Review all laboratory information covering PPE, infection control, operator and patient positioning, and use of the mirror and explorer.

The practical examination will focus on the intraoral use of the mirror and explorer

Materials: PPE

Typodont, manikin head, Cassette #1

*This lab will be given over a 2-day period. One half of the clinic session will be tested at one time. You will be assigned to one of your normal clinic days this week.

APPENDIX 2

Grade Rubric for Competency

LIT Dental Hygiene Program Competency Exam Pre and Post Appointment Procedures					
LIT Competency Statements	P2. Assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care. P6. Evaluate and utilize methods to ensure the health and safety of the patient and the dental hygienist in the delivery of dental hygiene.				
Student		Date:			
Instructor		Periodontal Case	NA		
Patient	Not Applicable	Prophy Type	NA		
Start time: End time:	Total Time:	Grade	Satisfactory/ Acceptable (S) Unacceptable (U)		
The student, in accordance with the standards set forth by the ADA and the Dental Hygiene Program, has demonstrated the following criteria.			Critical Error	Yes	No
1	Determines the functioning status of all equipment, reports malfunctions		Yes		
2	Stocks supplies in the cubicle and supply drawers		No		
3	Cleans all areas		Yes		
4	Flushes water lines for the specified time period		Yes		
5	Disinfects indicated areas		Yes		
6	Barrier protects indicated areas		Yes		
7	Prepares for biohazardous materials		No		
8	Sets up proper instruments and equipment		Yes		
9	Performs all pre-appointment procedures in less than 30 minutes		Yes		
10	Describes post-appointment procedures and answers question from Instructor		Yes		
11	Describes indicated end-of-session procedures (clinic is over)		No		
12	Wears appropriate PPE at all times		Yes		
Comments:					

APPENDIX 3**Sterilization Duty Guidelines**

Objective: Sterilization duty is designed to give the student the opportunity to develop and demonstrate proficiency in three specific areas:

- Instrument recirculation and sterilization equipment maintenance
- Setting up and breaking down specific clinic areas for daily use
- Team participation

You are expected to perform each of the tasks listed below. Inadequate preparation and follow through with any of the items on this check list will be noted on an incident report.

Arrive 15 minutes prior to the start of the clinic session and introduce yourself to the instructors. Report any problems that occur during the session to one of the instructors. Please DO NOT leave at the end of the clinic session until you are dismissed by one of the instructors.

1. Demonstrate knowledge of the types of supplies used for DH care in the clinic and radiology areas, and the preparation of these supplies for use by performing the following during scheduled sterilization time:
 - a. determines which supplies need to be restocked and request that an instructor/staff person obtain them for you if they are not available in the sterilization room.
 - b. prepares supplies for use by setting out in specific areas/containers or by packaging and sterilizing if necessary.
2. Demonstrate knowledge of personal protective equipment while working in the instrument recirculation area by wearing uniform, lab coat, mask, glasses/shield, examination or nitrile gloves when needed.
3. Determine which method of sterilization/disinfection is appropriate for specific instruments and materials by following instructions given in the risk management manual and in class.
4. Demonstrate a working knowledge of instrument recirculation and storage procedures by performing the following during scheduled sterilization time:
 - a. preparation of decontamination equipment
 - b. instrument decontamination
 - c. instrument packaging
 - d. preparation of sterilization equipment
 - e. operation of sterilization equipment
 - f. instrument storage
 - g. preparation of chemical solutions for disinfection and/or cleaning
5. Demonstrate knowledge of daily maintenance procedures for dental equipment by

- performing the following during scheduled sterilization time:
- a. prepares and distributes solutions for cleaning and maintaining the evacuation system.
 - b. prepares solutions for and performs the procedures to clean the autoclaves, if required.
6. Demonstrate knowledge of the set up and maintenance of the radiographic processing equipment by performing the following during scheduled sterilization time:
- a. makes sure the water is turned on for the automatic processor and check the fixer and developer levels.
 - b. prepares the processor for use by running a test film through to check operation.
7. Check the Panoramic X-ray machine for the proper date and time set-up. If incorrect, get assistance from an instructor.
8. Demonstrate knowledge of the classification of surfaces (Spaulding) by determining which decontamination techniques are appropriate for the clinic, radiology area, reception room and patient education room and by performing these techniques where necessary.
9. Demonstrate an understanding of the effect that orderliness and cleanliness has on the confidence and trust the patient will have in the dental professional by keeping the reception and patient education rooms and radiology area clean and orderly.
10. Demonstrate knowledge of proper biohazardous waste handling and disposal by following the procedures in the risk management manual.
11. Demonstrate effectiveness as a team member by performing the following for peers and faculty during scheduled sterilization time:
- a. supply retrieval
 - b. messenger
 - c. assistant

You are responsible for having a clinic instructor sign your form before and after clinic. Please respect their time and ask for signatures when they are not busy at the beginning of the clinic session.

APPENDIX 4**Pre-Clinic Sterilization Peer Instruction/Evaluation Check List**

Freshman Student Name _____ Senior Student Name/s _____

Date/s _____

The senior student on sterilization duty will provide instruction and support for the freshman student in the areas noted below. When you feel that the freshman student has the capability to perform the listed functions under minimal supervision, check off the appropriate area. Do not take this job lightly; remember the freshmen will be sterilizing your equipment next semester. Thank you for an anticipated job well done!

Attendance verification start of session: Time _____, Instructor Initials _____Attendance verification end of session: Time _____, Instructor Initials _____

_____ 1. Followed the uniform policy and wore appropriate PPE at all times.

_____ 2. Restocked clinic supplies

_____ 3. Instrument decontamination-

- a. Prepared the instrument washer for use
- b. Determined which instruments were to be placed in the instrument washer
- c. Placed instruments in the washer
- d. Processed instruments not able to be cleaned in the washer as directed
- e. Readied instruments for packaging

_____ 4. Used the Midwest Air Station correctly

_____ 5. Instrument packaging-

- a. Matched the correct packaging material to the instrument
 - b. Labeled each package appropriately
- _____ 6. Preparation of sterilization equipment-
- a. Checked water levels and identified which needed to be replenished
 - b. Added distilled water to the correct level
- _____ 7. Operation of sterilization equipment-
- a. Loaded instruments correctly, did not mix instruments that belong in different sterilizer cycles
 - b. Identified the proper sterilizer cycle for the instruments
 - c. Started the cycle
- _____ 8. Instrument storage-
- a. Properly removed instruments from sterilizer
 - b. Allowed to dry
 - c. Checked the integrity of each instrument package while placing instruments in the proper storage place
- _____ 9. Properly handled biohazardous waste materials
- _____ 10. Arrived 15 minutes prior to the start of the clinic session and did not leave until dismissed by an instructor.

Comments:

APPENDIX 5

Pre-Clinic Assisting and Clinic Operation Objectives

Arrive 15 minutes prior to the start of the clinic session and introduce yourself to the instructors.

The following should be accomplished during the assigned 8 hours:

1. Apply knowledge of pre and post operator procedures by assisting a senior student while preparing an operator for a dental hygiene appointment and while completing end- of-session procedures in an operator.
2. Familiarize yourself with clinic procedures by assisting/watching a senior student perform at least two of the following:
 - a. Extra and intra oral examination
 - c. Gingival/periodontal assessment
 - d. Periodontal charting
3. Observe an instructor evaluate at least two of the following:
 - a. Extra and intra oral examination
 - b. Gingival/periodontal assessment
 - c. Periodontal charting
4. Assist a senior student by suctioning during ultrasonic debridement, sealant placement or other procedure.

You are responsible for having a clinic instructor sign your form before and after clinic. Please respect their time and ask for signatures when they are not busy at the beginning of the clinic session.

Pre-Clinic Assisting Peer Instruction/Evaluation Check List

First Year Student Name _____

Session #1 Date _____

Attendance verification start of session #1: Time _____, Instructor Initials _____

Attendance verification end of session #1: Time _____, Instructor Initials _____

Session #2 Date _____

(if repeat is necessary)

Attendance verification start of session #2: Time _____, Instructor Initials _____

Attendance verification end of session #2: Time _____, Instructor Initials _____

1. Assisted in pre-operative procedures. Verified by: _____ (**Senior Student Initials**)2. Assisted in post-operative or end of session procedures. Verified by: _____
(**Senior Student Initials**)

3. Assisted/watched senior students perform at least two of the following:

Head and neck and intra oral examination Verified by: _____ (**Senior Student Initials**)Gingival/periodontal assessment Verified by: _____ (**Senior Student Initials**)Periodontal charting Verified by: _____ (**Senior Student Initials**)

4. Observed an instructor evaluate at least two of the following:

Extra and intra oral examination _____ **Instructor Initials**Gingival/periodontal assessment _____ **Instructor Initials**Periodontal charting _____ **Instructor Initials**5. Assisted with suctioning during ultrasonic debridement, sealant placement or other
(specify) _____. _____ (**Senior Student Initials**)6. Arrived 15 minutes prior to the start of the clinic session and did not leave until dismissed
by an instructor.

Comments:

APPENDIX 6**SUGGESTED INSTRUMENT ARRANGEMENT**

*Gracey curettes will not be used this year-

SG11/12R9E2, SG13/14R9E2, package these together

SG15/16R9E2, SG17/18R9E2, package these together

SG1/2R9E2 (you have 2) package these together

Instructors will assist you

Cassette #1 (for use on typodonts)**SIDE ONE****SIDE TWO**

Mirror

SN1379E2

Mirror

S204SXE2

XP23/NC127

SC13/14XE2

EXD 11/12A7

SYG 7/8EX2

SH5/339E2

SCNEVI4XE2

Cassette #2 (For partner use when working in the mouth)**SIDE ONE****SIDE TWO**

Mirror

SH5339E2

Mirror

S204SXE2

XP23/NC127

SCNEVI44XE2

EXD 11/12A7

SC13/14XE2

SN1379E2

SYG 7/8XE2

APPENDIX 7

STUDENT WORKSHEET FOR TRACKING SKILL EVALUATIONS AND CHECKLISTS, ASSESSMENT
AND COMPETENCY COMPLETION

NAME _____

Skill Evaluations	Self-evaluation	Instructor evaluation	
	Date	Date/s	
1. Position			
2. Positioning and Clock Position			
3. Instrument Grasp			
4. Mirror and Rests in the Anterior Sextants			
5. Mirror and Rests in the Mandibular Posterior Sextants			
6. Mirror and Rests in the Maxillary Posterior Sextants			
7. Movement and Orientation to the Tooth Surface			
8. Adaptation			
9. Angulation and Calculus Removal			
10. Instrument Strokes			
11. Basic Probing (intraoral)			
12. Explorer (intraoral)			
13. Sickle Scalers (typodont/intraoral)			
14. Universal Curets (typodont/intraoral)			

Skill and Communication Checklists	Self-evaluation	Instructor evaluation	
	Date	Date/s	
1. Medical History Communication			
2. Pulse and Respiration Communication			
3. Blood Pressure Assessment Communication			
4. Head and Neck Examination Communication			
5. Oral Examination Communication			
6. Occlusion Communication			
7. Gingival Description Communication			

Competency	Achievement Date	Instructor
1. Pre and Post Appointment Procedures		

Assessment/Procedure	Completion Date	Instructor
1. Extra-oral examination		
2. Intra-oral examination		
3. Periodontal Assessment		
4. Periodontal Charting		
5. Dental Charting		

6. Rubber Cup Polishing		
7. Fluoride Treatment		
Checklists	Date	
Pre-Clinic Assisting Checklist		
Peer Instruction in Sterilization		

APPENDIX 8

Medical Emergency Simulation Training

Participation in Medical Emergency Simulation Training is **mandatory**. Dental hygiene students must attend and actively participate in all components of the training to successfully meet course requirements

Purpose:

The Dental Hygiene Program at Lamar Institute of Technology (LIT), in collaboration with the EMT/EMS Program, requires all students to complete Medical Emergency Simulation Training. This interprofessional experience is designed to prepare students to recognize, assess, and manage medical emergencies that may occur in the dental setting.

Simulation training provides a safe and controlled environment where students can practice emergency response, clinical decision-making, and communication skills without risk to patients. Through this experience, students will develop the ability to identify and respond to emergencies such as syncope, hypoglycemia, cardiac events, and anaphylaxis while reinforcing prevention through proper assessment.

This training also supports the development of essential communication skills, including:

- Patient-centered communication during emergency situations
- Collaboration with EMT/EMS program
- Clear communication with healthcare team members
- Confirming directions and understanding to promote patient safety

Learning Objectives:

Upon completion of this training, students will be able to:

- Recognize and respond to medical emergencies in the dental setting
- Communicate clearly and professionally with patients and team members
- Provide calm, appropriate instructions during emergency situations
- Work effectively as part of a healthcare team, including EMT/EMS professionals
- Report patient status and actions accurately
- Follow directions and confirm communication to ensure patient safety
- Demonstrate professionalism throughout the simulation
- Participate in debriefing to reflect and improve performance

Training Overview:

Students will participate in a structured, scenario-based simulation experience in collaboration with the EMT/EMS Program.

- Students are assigned to small groups
- Each group rotates through multiple emergency scenarios
- Students rotate through designated roles within each scenario
- Simulations replicate real-life clinical emergencies using standardized protocols

Common emergency scenarios may include:

- Syncope and hyperventilation
- Hypoglycemia and diabetic emergencies
- Cardiovascular emergencies (e.g., cardiac arrest)
- Allergic reactions and anaphylaxis

Simulation Roles:

During each scenario, students will rotate through specific roles to reinforce teamwork and communication:

Primary Clinician (Lead Provider)

- Stops procedure and recognizes emergency
- Assesses patient condition (airway, breathing, circulation)
- Initiates appropriate emergency response (e.g., positioning, BLS, oxygen)
- Directs team members and maintains leadership throughout the scenario

Secondary Clinician (Assistant)

- Assists the Primary Clinician with patient care
- Retrieves emergency equipment (oxygen, AED, emergency kit)
- Prepares and assists with delivery of medications or interventions
- Provides support with CPR or ventilation if needed

Documenter (Recorder)

- Records accurate, time-stamped sequence of events
- Documents patient vital signs and changes in condition
- Logs all interventions and treatments provided
- Communicates documentation clearly during transition of care

Runner / Caller (Communicator)

- Activates emergency response (calls 911 or designated emergency system)
- Clearly communicates location, patient status, and situation

- Retrieves additional equipment as needed
- Assists with directing/escorting EMS to the scene

Role rotation ensures that all students experience multiple responsibilities and strengthen their team-based communication skills.

Step-by-Step Participation Process

1. Pre-Briefing (Initial Meeting)

- All students report to MPC 112 at the designated time
- Faculty and EMT/EMS instructors provide:
 - Training expectations
 - Review of emergency protocols
 - Role assignments and group organization
 - Communication expectations and safety guidelines

2. Scenario Rotation

- Students proceed with assigned groups to simulation stations
- Each group participates in multiple emergency scenarios
- Students rotate roles at each station
- Students are expected to:
 - Demonstrate appropriate clinical responses
 - Engage in effective team communication
 - Apply knowledge of emergency procedures and equipment

3. Interprofessional Collaboration

- Students work alongside EMT/EMS personnel
- Emphasis is placed on:
 - Respectful communication across disciplines
 - Understanding roles within the healthcare team
 - Coordinated patient care and handoff communication

4. Debriefing Session

- Students return to MPC 112 following completion of all scenarios
- Each group participates in a guided debriefing discussion
- Students reflect on:
 - Clinical decision-making
 - Communication effectiveness
 - Team dynamics
 - Areas of strength and opportunities for improvement

Failure to Meet Expectations / Remediation Policy

Students who do not meet expectations in the Medical Emergency Simulation Training or who fail to attend will be required to complete remediation to demonstrate competency.

Remediation may include participation in an alternate simulation experience, completion of additional assignments, or other faculty-directed activities designed to ensure competency in medical emergency response.

Successful completion of remediation is required to meet course requirements. Students who do not successfully complete the required training and/or remediation will not meet course competencies and will receive a failing course grade.

Submission Requirement:

After obtaining all required signatures, the completed Verification of Completion form must be submitted in Blackboard within one (1) week of completion to document successful completion of the training.

LIT Dental Hygiene Medical Emergency Training Grade Sheet/Checklist			
Student Name:		Date:	
Meets Expectations: Student independently performs the required skill or behavior accurately and consistently as described. Does Not Meet Expectations: Student is unable to perform the required skill or behavior accurately, performs it inconsistently, or requires prompting/assistance.			
	Criteria	Meets Expectations	Does Not Meet Expectations
1.	Arrive on time and prepared. Reports to designated location on time with required materials and readiness to participate.		
2.	Participate in all scenarios. Actively engages in each assigned simulation without refusal or disengagement		
3.	Demonstrate appropriate clinical response. Correctly identifies the emergency and initiates appropriate actions (positioning, oxygen, BLS, or other indicated interventions)		
4.	Communicate clearly and professionally. Uses clear, respectful, and appropriate verbal communication with team members and patient		
5.	Demonstrate teamwork and collaboration. Works effectively with group members, contributes to team effort, and supports others during the scenario		
6.	Follow directions and confirm communication. Gives clear directions, confirms understanding, and responds appropriately to communication from team members		
7.	Participates in debrief discussion Contributes to post-simulation discussion, reflects on performance, and engages in feedback		
8.	Maintain professionalism. Demonstrates appropriate behavior, respect, and accountability throughout the simulation experience		
Comments:			

Role Completion Checklist:

Students must complete each role during simulation:

☐ Primary Clinician☐ Documenter☐ Secondary Clinician☐ Runner/Caller**Verification of Completion**

This certifies that the student has successfully completed the Medical Emergency Simulation Training.

Student Name: _____

Signature: _____

Date: _____

Faculty/Instructor Name: _____

Signature: _____

Date: _____