Pre-Clinical Dental Hygiene (DHYG 1431.3A1)

CREDIT

SCH Semester Credit Hours: 4

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

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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

	Wilkins' Clinical Practice of the Dental Hygienist,14 th edition	Linda D. Boyd, Lisa F. Mallonee	Jones & Bartlett Learning, 2023, ISBN 9781284255997
2.	Patient Assessment Tutorials A Step by Step Guide for the Dental Hygienist, enhanced 4 th edition	Jill S. Gehrig	Jones & Bartlett Learning, 2018, LCCN:20220935944
3.	Fundamentals of Periodontal Instrumentation & Advanced Root Instrumentation, enhanced 8 th edition	Jill S. Gehrig, Rebecca Sroda, Darlene Saccuzzo	Jones & Bartlett Learning,2019, LCCN (unavailable)
4.	Instrument Kit	Pre-ordered	Hu-Friedy Instrument Co.
5.	Supply Kit	Pre-ordered	Patterson Dental Supply
6.	Uniform	Instructions to be given	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	Lecture	Topic	Reading/Online Assignment
Tues. 8/26	Lecture 1	Exposure Control PPE	Wilkins Ch-6
Thurs. 8/28	Lecture 2	Infection Control: Clinical Procedures	Wilkins Ch-7
Tues. 9/2	Lecture 3	Infection Control: Transmissible diseases	Wilkins Ch-5
Thurs. 9/4	Exam 1/Online Bb	Lectures 1-3	
Tues. 9/9	Lecture 4	Instrument Design and Classification/Implant Instruments	FPI Module 8 Bring instruments to class
Thurs. 9/11	Lecture 5	Medical/Dental History ASA Classification	Wilkins Ch-11 PAT Modules 5-6
Tues. 9/16	Lecture 6	Soft Tissue Lesions	PAT Module 12
Thurs. 9/18	Lecture 7	Vital Signs	PAT Modules 8,9,10
Tues. 9/23	Exam 2/Online Bb	Lectures 4-7	
Thurs. 9/25	Lecture 8	Head and Neck Exam	PAT Module 13
Tues 9/30	Lecture 9	Oral Exam	PAT Module 14
Thurs. 10/2	Library Training	Research Topic	Guest Speaker
Tues. 10/7	Lecture 10	Online Assignment No Class	Wilkins Workbook Ch-16 Due 10-15
Thurs. 10/9	Lecture 11	Hard Tissue Examination	Wilkins Ch-16

Date	Lecture	Topic	Reading Assignment
Tues 10/14	Exam 3	PAT Modules 13,14 Wilkins Ch-16	
Thurs. 10/16	Lecture 12 Dental Charting	Manual and Paperless charting	PP-Eagle Soft Dental Charting (in Module 4) Bring your red/blue pencil
Tues. 10/21	Lecture 13	Gingival Description	PAT Module 15
Thurs. 10/23	Lecture 14	Periodontal Assessment	FPI Module 18
Tues. 10/28	Lecture 15	Periodontal Classification	LIT Periodontal Classification System PP (in Module 4)
Thurs. 10/30	Lecture 16	Indices and Scoring Methods	Wilkins Ch-21
Tues. 11/4	Exam 4	Lectures 13-16	
Thurs. 11/6	Lecture 17	Non-Surgical Periodontal Therapy	Wilkins Ch-39
Tues. 11/11	Lecture 18	Dental stains and discolorations	Wilkins Ch-22
Thurs. 11/13	Lecture 19	Stain removal	Wilkins Ch-45 FPI online material 26
Tues. 11/18	Lecture 20	Fluoride	Wilkins Ch-36
Thurs. 11/20	Exam 5	Lectures 17-20	*Research Topic Due
Tues. 11/25	Online Assignment No Class	Air Polishing	PAT Module 27
Thurs. 11/27	HOLIDAY/NO CLASS	THANKSGIVING	
Tues. 12/2	Dental Charting Exam	Manual DC and Eagle Soft DC	Bring your red/blue pencil
Thurs. 12/4	Final Exam Review		All lecture material
Tues. 12/11	Comprehensive Final Exam		All lecture material

*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 call the appropriate instructor prior to the scheduled class, clinic or lab time. An absence will be considered unexcused if the student fails to notify the course faculty prior to the start of class, clinic, or lab. Attendance through Blackboard Collaborate is considered an absence. The course instructor must be notified at least one hour prior to the beginning of class/lab if the student plans to attend through Blackboard Collaborate. **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

Lecture		
Freshman	1.	Attend a Library Orientation and learn how to use the electronic indices
Research Project		and databases and the inter-library loan system.
Topic Assignment	2.	Freshman Research Project, Topic investigation
Portfolio	1.	Set up a portfolio
Examinations	1.	Five lecture examinations + one midterm lab practical exam
	2.	One comprehensive final examination
	3.	Dental charting exam

COURSE EVALUATION

1. Student will be required to complete both the lecture and clinical portions of the course. All course requirements must be met. Averaged graded exams must meet 75% or better.

GRADING SCALE:

A = 92 - 100

B = 83 - 91

C = 75 - 82*(passing score)

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.

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 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.

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.

Mandatory Tutoring

If a student receives a failing grade on any major exam, the student will be required to meet with course instructor within 2 weeks of the failed exam. One on one concept review by appointment with the course instructor will be provided and/or written academic warning when a student is failing to meet minimal requirements in the classroom setting.

Electronic Devices

Electronic devices are a part of many individual's lives today. Students must receive the instructor's permission to operate electronic devices in the classroom and lab. Texting on cell phones will not be allowed during class or clinic.

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 available by appointment.

See Student Handbook for more information about remediation policies.

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

* 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. Exposure Control PPE
- 2. Infection Control
- 3. Transmissible Diseases
- 4. Instrument Design and Classification
- 5. Medical/Dental history
- 6. Current Research topics
- 7. Vital Signs
- 8. Head and Neck Exams
- 9. Soft Tissue Lesions
- 10. Intraoral Exam
- 11. Hard Tissue Exams
- 12. Dental Charting
- 13. Gingival Description
- 14. Periodontal Assessment
- 15. Indices and Scoring Methods
- 16. Non-Surgical Periodontal Debridement
- 17. Extrinsic Stain Removal

18. Fluoride Application

COURSE OBJECTIVES

- 1. Exposure Control: Barriers
- Explain the technique and rationale for exposure control
- Identify the criteria for selecting effective barriers
- Explain the rationale, mechanics and guidelines for hand hygiene
- Identify and describe the manifestations and management of latex hypersensitivity
- 2. Infection Control
 - Describe the basic considerations for safe infection control practices
 - Explain methods for cleaning and sterilizing instruments
 - Describe procedures to prepare, clean and disinfect treatment areas
 - Explain procedures for managing hypodermic needles and occupational postexposure management
 - List types of waste disposal and how to handle
- 3. Transmissible Diseases
 - Describe the infectious disease process and and prevention of disease transmission. b
 - Apply the concept of standard precautions and transmission-based precautions to the process of dental hygiene care
 - Describe and identify transmissible diseases that may pose a risk to patients and dental healthcare personnel
 - Evaluate the oral healthcare needs of patients with transmissible diseases
- 4. Instrument Design and Classification
 - Identify the working end of each periodontal instrument by the design, name and number
 - Recognize the design features of the instrument handle
 - Demonstrate the ability to recognize a handle design to reduce pinch force required in the instrument grasp
 - Sort instruments by shank design
 - Identify the face, back and lateral sides of instruments
 - Determine the intended use of each instrument by design features
 - Identify how and where and instrument can be used on the dentition
- 5. Medical Dental History
 - Relate and define key terms and concepts in the creation of patient histories
 - Explain the importance of accurate and complete evaluation of medical and dental information
 - Discuss how the components of patient histories relate directly to the application of patient care
- 6. Current Research topics
 - Conduct research on current dental topics using a variety of digital resources
 - Provide a current topic to begin a research project
 - Cite reputable peer reviewed documents to be used in a research presentation

7. Vital Signs

- List and explain vital signs and how they play a role in safe patient treatment
- Demonstrate and explain correct procedures for assessing vital signs Recognize and assess factors that affect vital signs
- Describe correct use of equipment used in the assessment of vital signs
- Recognize normal vital signs in a variety of patients

8. Head and Neck Exams

- Explain the rationale for comprehensive head and neck exam
- Explain the systematic sequence in performing an assessment of the head and neck
- Identify normal, atypical and pathological findings
- Describe and document all findings
- Identify suspected conditions that may require a follow up and or referral for medical evaluation

9. Soft Tissue Lesions

- Given an image of a lesion, use the lesion descriptor worksheet to document and describe normal, atypical and pathological conditions
- Explain the importance of accurate lesion descriptions

10. Intraoral Exam

- Recognize normal atypical and pathological conditions of the oral anatomy
- Explain correct patient positioning for oral exams
- Document notable findings in the patients record
- Recognize the need for a referral for medical evaluation

11. Hard Tissue Exam

- Identify the three divisions of the human dentition
- Recognize and explain various developmental, non-carious lesions
- Describe types of dental injuries that can occur
- List the G. V. Black classifications for hard tissue findings
- List facts to be observed and recorded in the dental charting record
- Classify the occlusion of a patient
- Give examples of parafunctional habits
- Discuss types of occlusal trauma
- Identify and explain the use of study models in the clinical practice of dental hygiene

12. Dental Charting

- Explain the process for charting different dental conditions
- Recognize normal, atypical and pathological conditions of the hard tissue
- Recognize the stages of eruption in primary and secondary dentition

13. Gingival Description

- Describe gingival conditions that are indicative of health and disease
- Accurately document normal atypical and pathological findings in the patient record
- Discuss notable findings with instructors and patients

14. Periodontal Assessment

• Describe the components of a comprehensive periodontal assessment

- List the instruments to be used in assessing periodontal tissue
- Accurately document normal, atypical and pathological periodontal findings in the patient record
- Determine the patients periodontal state of health and record in the patient record

15. Indices and Scoring Methods

- Identify the purpose, criteria for measurement, scoring methods, range of scores and reference or interpretation scales for a variety of dental indices
- Calculate the score for a PHP index
- Correctly describe how to document a PHP score in a patient record
- Relate the PHP findings to patient education topics

16. Non-surgical Periodontal Debridement

- Explain the goals and desirable clinical endpoints or outcomes for non-surgical periodontal debridement
- Devise a care plan for a patient with each of the periodontal classifications
- Describe changes in the subgingival bacteria after debridement.
- Describe the current evidence related to laser therapy
- Develop post-operative instructions for a patient after debridement
- List the steps in re-evaluation after periodontal therapy
- Describe the risks and benefits of adjunctive antimicrobial therapy
- Evaluate the changes in the clinical attachment level

17. Extrinsic Stain Removal

- Describe the difference between a cleaning and polishing agent
- Explain the selection of the grit in the polishing agent depending on the patients' needs
- Discuss the rationale for avoiding a polishing procedure on demineralized areas
- Explain the abrasive particles shape size and hardness
- Recognize the types of powdered polishing agents
- Recognize any contradictions for polishing

18. Fluoride Application

- Describe the mechanisms of action of fluoride in the prevention of dental caries
- Explain the role of community water fluoridation in the decline of dental caries incidence in a community
- Recommend appropriate OTC and professionally applied fluoride application based on the patient's risk assessment
- Communicate the toxicity potential of fluoride
- List the different types of professionally applied fluoride
- List the appropriate actions in case of accidental fluoride poisoning
- Describe the process for giving a professionally applied fluoride treatment

APPENDIX 1

RESEARCH PROJECT INSTRUCTIONS FOR IDENTIFYING POTENTIAL TOPICS

Preparation for Choosing a Research Project Topic

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

- 1. Identify 2 subjects you would enjoy researching and writing a detailed paper about.
 - The subjects must be narrow in focus not broad.
 - How periodontal disease affects cardiovascular health as opposed to periodontal disease.
 - You need to make sure there is enough easily obtainable information so you have a relatively broad base of knowledge to research.
 - Make sure there is information from unbiased sources available.
 - o Companies that produce products always have research that proves their products work. You want to find information from sources unaffiliated with the company to confirm the companies test results
 - The information must be current, published no earlier than 2012.
 - The information MUST NOT come from consumer sources.
 - o Ladies Home Journal is nice but it is not a professional source.
 - o If you have any doubts as to whether your information is from an acceptable source ASK before you hand in the information. <u>YOU WILL NOT BE GIVEN</u> CREDIT FOR CONSUMER INFORMATION.
- 2. Identify 4 articles from professional peer reviewed sources (journals or internet) for <u>EACH</u> topic with a complete reference page entry according to the APA documentation system.
- 3. Hand in a copy of the most informative article you found for <u>each</u> topic.
- 4. I expect you to use both the internet and regular library resources for your information.

What you will hand in:

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

PRE-CLINICAL DENTAL HYGIENE DHYG 1431 Research Topics					
LIT Competency		 2. Assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care. 4. Communicate effectively with individuals and groups from diverse populations both verbally and in writing. 			
Stud	ent		Date		
Topics					
ADA	The student, in accordance with the standards set forth by the ADA and the Dental Hygiene Program, has demonstrated the following criteria.		Possible Points	Points Awarded	
1	Submitte	ed on time.	1		
2	chose the	Explanation of topic includes why the student e topic and why information on the topic is at or useful for a practicing dental hygienist or DDS	2		
	chose the	Explanation of topic includes why the student e topic and why information on the topic is at or useful for a practicing dental hygienist or DDS	2		
3	Topic 1: Student submits a reference page of four (4) separate articles from peer reviewed journals or appropriate professional web sites		4		
	separate	Student submits a reference page of four (4) articles from peer reviewed journals or appropriate anal web sites	4		
4	Each reference page entry follows the APA format		4		
5	Submitted articles were published in the last 5 years		4		
6	A copy of each top	f one article (the most informative) is submitted for ic	2		
7	Written 6	explanation has few (less than 3) grammatical errors	2		
	Total Poi	nts	25		

APPENDIX 2

GRADE COMPUTATION SHEET

GRADE COMPUTATION SHEET

Exam Average x .60 =	
Dental Charting Exam x .10 =	
Research Topic Investigation x .10 =	
Final Exam x .20 =	
Add total points	
Final Letter Grade	