

DENTAL HYGIENE CARE II (DHYG 2331)

CREDIT

3 Semester Credit Hours (3 hours lecture)

MODE OF INSTRUCTION

Hybrid

PREREQUISITE/CO-REQUISITE:

Prerequisite: DHYG 1301, DHYG 1431, DHYG 1304, DHYG 1235, DHYG 1103, DHYG 1219, DHYG 1339, DHYG 2301, DHYG 2133, DHYG 1260.

Co-Requisite: DHYG 1311, DHYG 1339, DHYG 2261.

COURSE DESCRIPTION

A continuation of Dental Hygiene Care I. Dental hygiene care for the medically or dentally compromised patient including advanced instrumentation techniques.

COURSE OBJECTIVES

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

- Apply the theory, concepts, and skills involving specialized materials, tools, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, social, and legal systems associated with the occupation and the business/industry.
- Demonstrate legal and ethical behavior, safety practices, interpersonal and teamwork skills.
- Demonstrate appropriate written and verbal communication skills using the terminology of the occupation and the business/industry.

INSTRUCTOR CONTACT INFORMATION

Instructor: Lisa Harrell, RDH, BS

Email: lrharrell@lit.edu (allow 24-48 hours for response time)

Office Phone: (409) 247-4884

Office Location: MPC 206

Office Hours: Mondays 9:00-10:30; Tuesdays 12:30-3:30; Thursdays 9:00-1:00

REQUIRED TEXTBOOK AND MATERIALS

Nield-Gehrig, Fundamentals of Periodontal Instrumentation & Advanced Root Instrumentation, 8th edition, Lippincott, Williams, & Wilkins, 2017. ISBN: 9781496320209.

Boyd, Linda D. et. al., Wilkins' Clinical Practice of the Dental Hygienist, 13th edition, Jones & Bartlett Learning. ISBN: 978-1-496-39627-3

Approved: **Initials/date**



**LAMAR INSTITUTE
OF TECHNOLOGY**

COURSE CALENDAR

Topic		Assignments
AUGUST		
Week 1	Introduction to DH Care II Ultrasonic introduction	*Ultrasonic Practice in the Clinic 12:30pm – 3:30 pm- EVERYONE!
	Fundamental of Ultrasonic Instrumentation for Complete Debridement Procedures	Wilkins Chapter 37 Pgs. 655-663
Week 2	Area-Specific Curets/Advanced Instrumentation & Root Debridement	*Gracey practice day in clinic 12:30 pm - 3:30 pm- EVERYONE! Wilkins Chap.37 Pgs.652-654, 686 Periodontal Instrumentation Book Module 19 & 21 Watch Area Specific Videos (2) Instrumentation Book's resource
	Continue Area-Specific Curets/Advanced Instrumentation & Root Debridement *Bring Typodont & Gracey curets to class	
SEPTEMBER		
Week 3	NO CLASS – LABOR DAY	
	Advanced Instrumentation & Root Debridement	Watch Advanced Fulcrum Videos on Maxillary and Mandibular Arch
Week 4	E-Portfolio Journal Entry #1 Due	
	Continue Advanced Instrumentation & Root Debridement Air Polishing	Wilkins Chapter 42 Pgs. 739-743 Periodontal Instrumentation Book Module 26
	EXAM 1 (On Blackboard)	Opens Sept 12th at 10:00 am closes Sept 14th 10:00 pm
Week 5	Local Anesthesia/Pain Management	Wilkins Chapter 36 Pgs. 620-639
	Continue Local Anesthesia/Pain Management	

Week 6	Antimicrobial Therapy/Treatment	Wilkins Chapter 39 Pgs 694-699
	Nitrous Oxide-Oxygen Sedation/Pain Management	Wilkins Chapter 36 Pgs. 615-620
OCTOBER		
Week 7	Arestin Webinar	Marie Markesberry, RDH
	Continue Nitrous Oxide-Oxygen Sedation/Pain Management	
Week 8	Question & Answer time for Exam 2 Class Activity – Case Studies	
	Class time for group work - Research Project Corrections/Modifications Due by Oct. 13 @ 5:00 pm	Submit corrected PowerPoint through Blackboard
	EXAM 2 (On Blackboard)	Opens Oct 12 th at 10:00 am closes Oct 14 th 10:00 pm
Week 9	E-Portfolio Journal Entry #2 Due	
	Patient with an Endocrine Disorder/Hormonal Changes	Wilkins Chapter 53
Week 10	Patients with a Disability	Wilkins Chapters 51
	Patient with Neurologic Disorder & Stroke	Wilkins Chapter 52
Week 11	Respiratory Disease	Wilkins Chapter 60

NOVEMBER		
	Respiratory Disease - continued	
Week 12	Patient with Neurodevelopmental Disorder	Wilkins Chapter 50
	Blood Disorders	Wilkins Chapter 62
Week 13	Cardiovascular Disease	Wilkins Chapter 61
	EXAM 3 (On Blackboard)	Opens Nov 15 th at 10:00 am closes Nov 17 th 10:00 pm
Week 14	Medically Compromised Patient (presentations) TBA	Cleft Lip/Palate & Alcoholic Patient Oral/Maxillofacial Surgery Patient Patient with a Sensory Impairment
	NO CLASS – THANKSGIVING HOLIDAY	
Week 15	Medically Compromised Patient (presentations) TBA	Family abuse/neglect & Seizure Disorder & Neurodevelopment Disorder

Week 15	Research Project Presentations to Sabine Dental Hygiene Association	6:00 pm in the MPC
	Medically Compromised Patient (presentations) TBA	Mental Health Disorders (Anxiety, Depressive, Bipolar) & Mental Health Disorders (Feeding & Eating Disorders, Schizophrenia)
DECEMBER		
Week 16	E-Portfolio Journal Entry #3 Due	
	Comprehensive Final	

ATTENDANCE POLICY

Absenteeism

In order to ensure the students in the dental hygiene program achieve the necessary didactic and clinical competencies outlined in the curriculum, it is necessary that the student complete all assigned lecture classes, clinical and laboratory hours. It is the responsibility of the student to attend class, clinic or lab. The instructor expects each student to be present at each session. It is expected that students will appear to take their exams at the regularly scheduled examination time. Make-up examinations will be given **only** if the absence is due to illness (confirmed by a physicians' excuse), a death in the immediate family, or at the discretion of the instructor.

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 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.

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 \(lit.edu\)](https://www.lit.edu/specialpopulations).

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.

*** 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 REQUIREMENTS

COURSE EVALUATION

Final grades will be calculated according to the following criteria:

3 Exams	55%
Research Project Presentation	15%
Medically Compromised Presentation	10%
Class Participation	5%
Final Exam Grade	15%

GRADING SCALE

The student must pass the course with a 75% or more to receive credit for DHYG 2153. Failure to complete course work will result in the grade of "F" being awarded for DHYG 2153 and dismissal from the DH program. Exclusions from this policy will be dealt with on an individual basis by the instructor.

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

LIT does not use +/- grading scales

COURSE OUTLINE

- I. Advanced Instrumentation & Root Debridement 270 minutes
 - A. Advanced Fulcrums
 - B. Define root debridement
 - C. Objectives and benefits of root debridement
 - D. Instrumentation techniques for effective root debridement
 - E. Design, Uses and Effective instrumentation with specialized instruments
 - 1. Site-Specific curets
 - 2. After five curets
 - 3. Mini five curets
 - 4. Diamond-coated instruments
 - 5. Endoscope
 - 4. Hoe
 - 5. File
 - 6. Chisel
- II. Air Polishing 30 minutes
 - A. Uses and preparation of air polishers
 - B. Mode of action and effects of air polishers
 - C. Instrumentation techniques for air polishing
 - D. Precautions and contraindications for using air polishers
- III. Powered Instrumentation 330 minutes
 - A. Powered Instrument design and function
 - B. Advantages and disadvantages of powered instrumentation
 - C. Mode of action of powered instruments
 - D. Effects of powered instrumentation
 - E. Preparing for powered instrumentation
 - F. Patient selection for powered instrumentation
 - G. Effective instrumentation with a powered instrument
 - H. Infection control and precautionary measures
 - I. Tip wear and replacement
- IV. Antimicrobials/Chemotherapeutic Agents 120 minutes
 - A. Actions and substantivity of antimicrobials/chemotherapeutic agents
 - 1. Antibiotics
 - 2. Chlorhexidine

- 3. Phenolic compounds
 - 4. Sanginarine
 - 5. Oxygenation agents
 - B. Indications and contraindications for use of antimicrobials/chemotherapeutic agents
- V. Local Anesthesia 270 minutes
 - A. Classification of local anesthetics
 - B. Types of oral injections
 - C. Tray set up for injection
 - D. Nerves and structures anesthetized
 - E. Injection sites and needle position
- VI. Nitrous Oxide Sedation 270 minutes
 - A. History of nitrous oxide sedation
 - B. How nitrous oxide works
 - C. Components of a nitrous oxide unit
 - D. Indications and contraindications for nitrous oxide use
 - E. Procedure for administration of nitrous oxide sedation
 - F. Normal vs. abnormal responses to nitrous oxide sedation
 - G. Emergency procedures concerning nitrous oxide sedation
- VII. Special Needs Patients 720 minutes
 - A. Indications and contraindications for dental treatment
 - B. Emergency management of special needs patients
 - C. Periodontal management of special needs patients
 - D. Recall intervals for special needs patients
 - E. Special patients addressed include:
 - 1. Patient with Endocrine Disorder/Hormonal changes
 - 2. Patient with a Disability
 - 3. Patients with physical impairment
 - 4. Respiratory disease
 - 5. Blood disorders
 - 6. Patients with Cardiovascular Disease
- VIII. Medically Compromised Patient 360 minutes
 - A. Indications and contraindications for dental treatment
 - B. Emergency management of medically compromised patients
 - C. Periodontal management of medically compromised patients
 - D. Recall intervals for medically compromised patients
 - E. Medical conditions addressed include:
 - 1. Oral surgery/Maxillofacial surgery patient
 - 2. Patient with alcoholism
 - 3. Cleft lip and palate patient
 - 4. Patient with a Sensory Impairment
 - 5. Substance-related disorders
 - 6. Family abuse and neglect
 - 7. Neurodevelopment disorder
 - 8. Mental Health disorders

LEARNER OBJECTIVES

Powered Instrumentation

1. Given information about oral conditions and general health status, identify those patients for whom powered instrumentation is or is not an appropriate choice.

2. Describe the advantages and disadvantages of ultrasonic instrumentation.
3. Briefly describe how the powered instrument removes deposits.
4. Identify precautions that must be taken to minimize cross-contamination during powered instrumentation.
5. Identify four important measures for helping the patient cope with water flow.
6. Describe the procedure for preparing an instrument insert for use in an ultrasonic unit.
7. Compare and contrast standard-diameter and slim-diameter instrument tip design.
8. Describe the best sequence and stroke pattern for effective biofilm & calculus removal using powered instrumentation.
9. Describe the length and speed of the stroke used during powered instrument.
10. Contrast powered instrumentation principles with those employed with hand instruments.
11. List three functions of the water lavage in ultrasonic instrumentation.
12. Briefly describe research findings related to effectiveness, tissue response, root smoothness, and safety precautions concerning powered instrumentation.
13. Discuss the differences in the magnetostrictive, piezoelectric and sonic scalers.

Advanced Instrumentation and Root Debridement

1. Given a variety of area-specific curets, identify the design characteristics of each instrument.
2. Name the uses of area-specific curets.
3. Describe how the clinician can use visual clues to select the correct working-end of an area-specific curet on anterior and posterior teeth.
4. Describe characteristics of root morphology that make root instrumentation challenging.
5. Define root debridement.
6. List benefits of root debridement.
7. State the primary objective of root debridement.
8. Compare root debridement to scaling.
9. Identify instruments utilized for root debridement.
10. Describe the technique used and evaluation of root debridement.

Special Instruments

1. Identify the use of diamond-coated instruments
2. Describe an endoscope and its purpose.
3. Identify the use of the hoe.
4. Describe the design of the hoe.
5. Describe principles of instrumentation with the hoe.
6. Identify three contraindications for utilization of the hoe.
7. Identify the use of the file
8. Describe the design of the file.
9. Describe principles of instrumentation with the file.
10. Describe the design of the chisel.
11. Identify three areas in which the chisel is appropriate for use.
12. Describe the application of the chisel for instrumentation.

Air Polishing

1. List the uses of Air polishers.
2. List the contraindications for using air polishers.
3. Describe the mode of action and effects of the air polisher.
4. Discuss instrumentation techniques and precautions.

Chemotherapeutic Plaque Control

1. Compare and contrast the action, substantivity, indication and contraindications of the following chemotherapeutic plaque control agents.

- Antibiotics
- Chlorhexidine
- Phenolic compounds
- Fluorides
- Sanguinarine
- Oxygenation agents

Local Anesthesia

1. Describe the procedure for injection site preparation.
2. Classify local anesthetics.
3. Define block anesthesia.
4. Define infiltration anesthesia.
5. Describe the appropriate tray set-up for injection.
6. Identify the nerve and structures anesthetized and needle position for each injection site.

Nitrous Oxide Sedation

1. Define nitrous oxide and oxygen conscious sedation.
2. List indications/contraindications for nitrous oxide sedation.
3. Describe the history of nitrous oxide sedation.
4. List benefits of nitrous oxide.
5. Describe the mechanism by which nitrous oxide works.
6. Define conscious according to the ADA.
7. Describe normal responses to nitrous oxide sedation.
8. State properties of nitrous oxide.
9. Give and be able to utilize the equation for determining nitrous oxide concentration.
10. List signs and symptoms in response to nitrous oxide sedation by % of nitrous concentration.
11. State the acceptable concentration range for maximum nitrous oxide sedation.
12. Describe factors affecting the concentration needed for nitrous oxide sedation.
13. Describe the procedure for patient selection and list contraindications.
14. Define hypoxia and how to avoid hypoxia.
15. Describe the equipment used for nitrous oxide sedation.
16. Describe the procedure for administration of nitrous oxide sedation.

The Oral Surgery and Maxillofacial Surgery Patient

1. Discuss the role of the dental hygienist in the pre- and postsurgery care of the oral and maxillofacial surgery patient.
2. Discuss pre- and postsurgical care planning for the maxillofacial surgery patient.
3. Identify types of maxillary and mandibular fractures and discuss treatment options.
4. Describe modifications for dental hygiene treatment, diet, and personal oral care procedures needed after maxillofacial surgery.
5. Explain dental hygiene care needed before and after general surgery.
6. Describe emergency care for a fractured jaw patient.

The Patient with Alcoholism

1. Explain key terms and concepts related to the metabolism, intoxication effects, and use patterns of alcohol.
2. Discuss health hazards related to prolonged alcohol use.
3. Discuss the use of alcohol during pregnancy.
4. Explain withdrawal syndrome.
5. Discuss oral conditions seen in alcoholics.
6. List different treatment options for patients using alcohol.

The Patient with a Cleft Lip and/or Palate

1. Describe the types of cleft lip and palate that result from developmental disturbances.
2. Discuss problems presented with different classifications of clefts.
3. Discuss types of treatment.
4. Identify psychological effects of patient care.
5. Discuss ways to help a patient obtain treatment.
6. Identify common occurrences found in cleft patients.
7. Discuss the importance of individualized education programs when treating the cleft patient.

The Patient with a Mental Health Disorder

1. Describe the various types of mental health disorders and major symptoms of each.
2. Discuss the side effects of treatment for mental health disorders that may have oral health implications.
3. Explain dental hygiene care treatment considerations for each major category of mental health disorder which include:
 - Anxiety disorders
 - Depressive disorders
 - Bipolar disorder
 - Feeding and eating disorders
 - Schizophrenia
4. Be able to identify patients at risk for an emergency, how to prevent an emergency, and how to prepare for an emergency.

The Patient with a Neurodevelopmental Disorder

1. Define and describe neurodevelopmental disorders.
2. Give examples of the characteristics, oral findings, and health problems significant for providing dental hygiene care for patients with:
 - Intellectual Disorder
 - Down syndrome
 - Autism spectrum disorder
3. Recognize adaptations necessary for providing dental hygiene care for a patient with a neurodevelopmental disorder.

The Patient with a Seizure Disorder

1. Define each of the terms associated with types of seizure disorders.
2. Discuss the etiology of seizure disorders.
3. Describe the clinical manifestations of seizure disorders.
4. Develop a dental hygiene care plan, including patient education prevention strategies, for working with patients who have seizure disorders.
5. Discuss the occurrence of the phenytoin induced gingival enlargement.
6. Describe emergency care procedures to employ when a seizure occurs.

The Patient with Neurologic Disorder and Stroke

1. Identify and define key terms and concepts related to physical impairment.
2. Describe the characteristics, complications, occurrence, and medical treatment of a variety of physical impairments.
3. Identify oral factors and findings related to physical impairments.
4. Describe modifications for dental hygiene care based on assessment of needs specific to a patient's physical impairment.
5. Discuss etiologic factors, occurrence, signs and symptoms, medical treatment, and dental hygiene care of the following impairments/disorders:

- Spinal Cord Injury
- Cerebrovascular accident
- Bell's Palsy
- Multiple Sclerosis
- Amyotrophic Lateral Sclerosis
- Parkinson's Disease
- Myasthenia Gravis
- Postpolio Syndrome
- Cerebral Palsy
- Muscular Dystrophies
- Myelomeningocele
- Arthritis
- Scleroderma

The Patient with a Sensory Impairment

1. Describe the purpose of the Americans with Disabilities Act.
2. Explain the causes and types of visual and hearing impairment.
3. Identify different auxiliary aids that help the visually and hearing impaired.
4. How to communicate with the visually and hearing impaired.

Medically Compromised Patient

Students will discuss cases of medically compromised patients to provide significance and management of medical problems in the dental office.

The student will emphasize:

1. The periodontal management of these patients.
2. Indications and contraindications for dental treatment.
3. Identify patients who are taking drugs for systemic diseases.
4. How to prepare/manage a medical emergency in the dental office.

Cases to be addressed include:

- Ischemic heart failure/Congestive heart failure/Myocardial infarction
- Congenital heart disease/Mitral valve prolapse
- Rheumatic heart disease/ Infective endocarditis
- Hypertensive patient/Hypertensive heart disease
- Blood disorders
- Respiratory disease
- Thyroid disease
- Alzheimer's patients
- Family abuse and neglect
- Substance-related disorders
- Head and neck cancer

APPENDIX

Grade Computation Sheet

Test Grades:

1. _____

2. _____

3. _____

Test Average: _____

(Total 3 exams and divide by 3 for average)

Test average: _____ X .60= _____ +

Research Project Presentation: _____ X .15= _____ +

Medically Compromised Presentation: _____ X .10= _____ +

Final Exam Grade: _____ X .10= _____ +

Participation: _____ X .05= _____

Total of above: _____

Final Grade: _____

Instructions for Magnetostrictive Ultrasonic Practice

Needed Supplies:

- Ultrasonic insert tips
- Face shield
- Mask
- Gloves
- Nitrile gloves
- Ultrasonic Skill evaluation from clinic syllabus
- Instrumentation book – page 708

Set Up:

- Without gloves take the unit out of the box/container
- Connect the power cord, water line and foot pedal
- Set up the head in the patient chair with your typodont

Disinfect:

- With nitrile gloves disinfect the cart, unit and hose

Barrier:

- Remove nitrile gloves, wash hands and put on exam gloves
- Place a barrier across the cart covering the unit
- Attach the handpiece and place on top of the barrier

Turn on the power and place black handpiece sleeve on to cord

Purge the water line for 2 minutes over the sink

Fill handpiece with water & lubricate o-ring on insert

Insert your universal tip

Adjust the spray to a fine mist

Universal tip Use power setting from halfway mark to high power
For heavy to light deposits

Slim line tip Use power setting from low power to halfway mark
For light deposits and root smoothing

You will practice strokes that were demonstrated in class. You will practice in pairs. Each operator will complete **Module 26 Skill Application** for Powered Instrumentation in the Instrumentation Book on **page 708**. This will be checked by the instructor but not turned in for a grade. The first operator will practice while the second operator suctions with the high-speed suction. Clinic faculty will assist you as needed. You will be instructed when to switch operators.

Instructions for Area Specific Curet and Advanced Fulcrum Practice

Needed supplies:

- Gracey curets (1/2, 11/12, 13/14, 15/16, 17/18)
- Typodont
- Instrumentation book
- This page is needed for Area designations

Set up:

- Set up head with your typodont
- Have available area specific curets 1/2, 11/12, 13/14 or 1/2, 15/16, 17/18

You do not need to disinfect or barrier for this practice.

You will practice strokes with your area specific curets and advanced fulcrums that were demonstrated in class. You will practice in pairs.

Each operator will do the following skill application modules in the instrumentation book:

- Module 19 Area Specific Curets on pages 485-486.
 - Area 1 = Teeth # 3, 7
 - Area 2 = Teeth # 12, 15
 - Area 3 = Teeth # 19, 24
 - Area 4 = Teeth # 27, 31
- Module 21 Advanced Techniques for Root Surface Debridement on page 563

Clinic faculty will assist you as needed. You will be instructed when to switch operators. The skill evaluations will be checked by the instructor but not turned in for a grade.

MEDICALLY COMPROMISED PATIENT PRESENTATION CRITERIA

The purpose of this project is to familiarize the student with the medically compromised patient and to supply appropriate treatment methods for these patients. It also gives the student an opportunity to research a topic and make an oral presentation to their peers. This project will consist of an oral report along with a PowerPoint presentation. A minimum of three references should be used in this presentation (references should be no older than 5 years). One reference may be obtained from the internet. The oral report will be 15-20 minutes in length. At the end of the report, provide 3 multiple choice test questions related to the report. Review the test questions with the class. Upload the PowerPoint presentation, the test questions and a bibliography of your references to the instructor through Blackboard.

Topics for this project will include the following:

- Cleft Lip & Palate
- Alcoholic patient
- Oral & Maxillofacial Surgery patient
- Patient with a Sensory Impairment
- Neurodevelopment Disorder
- Mental Health Disorders
 - Anxiety, Depressive, Bipolar
 - Feeding & Eating Disorders, Schizophrenia
- Family abuse/neglect
- Substance-related disorders
- Seizure Disorder

Students will be randomly assigned in groups of two or three and will be assigned one of the topics above to research. Thorough research of the medical condition should be completed by the group. Special attention should be paid to treatment of the condition, how the condition impacts oral health and dental treatment, including contraindications, management, and emergency protocol for the patient with this condition.

This presentation will be 10% of the grade for DHYG 2331.

MEDICALLY COMPROMISED PATIENT PROJECT INFORMATION

Grading rubric for this project can be found on the following page of this syllabus. Additional information for use in completing your presentation includes, but is not limited to, the following:

Thoroughly research the condition/disease you have chosen.

- Etiology
- Occurrence and in what population
- Treatment of condition
- Medications used in treatment

What are dental concerns associated with this disease/condition?

- Indications and contraindications for dental treatment
- How will oral health be impacted
- Will medical treatment and/or medications impact oral health? How?
- Periodontal management of this patient

What would be expected and accepted treatment options for a patient with this disease/condition?

- Pre-med
- Patient positioning
- Appointment length
- Ultrasonic use
- Recall intervals

Is there a possibility for a medical emergency with a patient with this disease/condition?

- Preparation of a possible emergency
- Avoidance of an emergency
- Management of an emergency

You may want to reference some of the National Board review books to see what type of information may be referred to on boards concerning some of these topics.

DHYG 2331			
Medically Compromised Patient Presentation Evaluation			
LIT Competency Statements	CC2. Assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care. CC4. Communicate effectively with individuals and groups from diverse populations both verbally and in writing.		
Student		Date:	
Instructor			
			Total points awarded

The student, in accordance with the standards set forth by the ADA and the Dental Hygiene Program, has demonstrated the following criteria.		Total Points	Points Awarded
1	Thoroughly defined and discussed medical condition, the etiology, and occurrence of the condition	15	
2	Demonstrates effective interpersonal communication skills. Students were easy to hear and understand. Used good vocal projection and enunciation.	10	
3	Discussed oral manifestations of the condition or from use of medications	15	
4	Discussed management of the patient before treatment, during treatment & after treatment including emergency management protocol for the condition	20	
5	Thoroughly discussed indications and contraindications for treatment	10	
6	PowerPoint Presentation was easily understood. No typographical errors and free from extraneous information.	10	
7	Test questions were appropriate and well explained.	5	
8	Student handouts were informative and easily understood	5	
9	References used were current	10	
Total Points Possible		100	

Comments:

RESEARCH PROJECT PRESENTATION CRITERIA

Each student worked on preparing and presenting a research project last spring in DHYG 2301/ Dental Hygiene Care I. Presentations were made to fellow classmates and to faculty. Grades were assigned to the research projects in DHYG 2301/ Dental Hygiene Care I and suggestions were made for improving the presentation.

In DHYG 2331, students are expected to have made the changes suggested to improve their presentations. Evidence of the changes must be turned in to the instructor by the due date published in the course calendar. This is part of the grade for the presentation.

This semester, students will be responsible for presenting their research project to local area Dental Hygienists. Judges from the audience will evaluate each presentation. Points will be tabulated and monetary awards will be given to the top three groups with the most points. Students have the opportunity to present their research project to the Student Chapter of the American Dental Hygienists Association meeting during the Spring.

The instructor for DHYG 2331 will use the evaluation form on the following page of this syllabus to assign a grade to each student for the research project presentation. This presentation will be 10% of the grade for DHYG 2331.

DHYG 2331		
Research Project Presentation Evaluation		
LIT Competency Statements	CC2. Assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care. CC4. Communicate effectively with individuals and groups from diverse populations both verbally and in writing.	
Students		
Research Project Title		
Evaluator		Date:
100 Total Points Available		_____ Total Points Awarded

The student, in accordance with the standards set forth by the ADA and the Dental Hygiene Program, has demonstrated the following criteria.		Total Points	Points Awarded
1	Thoroughly defined and discussed Research Project Topic	15	
2	Subject matter presented reflected accurate and current information	15	
3	Presentation was organized and flowed in a logical sequence	10	
4	Audiovisual materials were well constructed and easily understood	15	
5	Audiovisual materials were integrated into the presentation	10	
6	Clinicians demonstrated professional demeanor	10	
7	Clinicians demonstrated knowledge and skill in the subject area	5	
8	Clinicians were easily heard and understood – able to correctly pronounce words and not read material	5	
8	Clinicians were receptive to questions and provided additional information when needed	5	
9	Handouts were informative and easily understood	5	
10	Suggested corrections from the Spring semester were made to the PowerPoint and/or brochure	10	
	Total Points	100	

Comments:

E-Portfolio

This semester there will be several journal entries to add to your E-Portfolio. These journal entries are meant to be a reflection on what you have learned through your clinical experiences, patient interactions, challenges or triumphs you have encountered and growth you have seen within yourself.

Please use proper grammar, spelling, and punctuation. Refrain from inappropriate language, derogatory comments, and non-clinical issues. You will submit 3 complete journal entries during the semester.

The following are to be included in your E-Portfolio this semester:

Journal Entry #1 – due date Week 3

1. Did you feel prepared coming into 2nd year clinic?
2. What could you, as a student, have done differently to be better prepared for clinic?
3. Since the beginning of this semester, what differences have you seen in yourself in clinic?

Journal Entry #2 – due date Week 6

1. At this point in the semester, where do you see that you have made the most improvement?
2. What have your challenges been so far and how have you been able to overcome them?
3. In what area do you feel that you have excelled in the clinical setting or what area do you feel that you still need to develop your skills?

Journal Entry #3 – due date Week 13

1. Comparing where you ended the semester to when you started in August, where do you see the most growth in clinic?
2. Were there any moments when you had a patient interaction that was challenging or rewarding? Explain that moment.
3. What skill area do you feel that you positively developed the most this semester?

Also, this semester you will be adding your Community Service to your E-Portfolio (Bingman Fluoride Varnish program). Write a description of your community service hours for the Fall semester. Include where you volunteered, what you did for the organization, who you interacted with, and how long you volunteered. This should be included to your 1st year entries. Answer the following questions:

1. What did you discover about yourself while volunteering?
2. Reflect on how volunteering is helping you grow as a professional.

CLASS PARTICIPATION RUBRIC

	3	2	1	POINTS
Attendance/Promptness	Student is always prompt, regularly attends class, and does not leave class early.	Student is sometimes late to class, regularly attends class but sometimes leaves class early.	Student is habitually late to class, has frequent absences and/or habitually leaves class early.	
Level of Engagement in Class	Student contributes to class by offering ideas and asking questions and is able to correctly answer questions when asked.	Student occasionally contributes to class by offering ideas and asking questions and sometimes is able to answer questions when asked.	Student rarely contributes to class by offering ideas and asking questions and rarely is able to answer questions when asked.	
Listening Skills	Student listens when others talk, both in groups and in class. Student actively participates in group settings.	Student listens when others talk, both in groups and in class. Student somewhat participates in groups settings.	Student does not listen when others talk, both in groups and in class. Student does not participate in group settings.	
Behavior	Student does not display disruptive behavior during class. Stays seated, refrains from talking to neighbors, and keeps cell phones/computers put away.	Student rarely displays disruptive behavior during class. Rarely leaves during class, rarely talks to neighbors, or uses cell phones/computers during class.	Student occasionally displays disruptive behavior during class. Occasionally leaves during class, talks to neighbors, or uses cell phones/computers during class.	
Preparation/Assignments	Work submissions are always on time. Always prepared for assignments and class.	Student is usually prepared for class with assignments and required class materials. Submitted some assignments late.	Student is rarely prepared for class with assignments and required class materials. Had multiple late submissions.	
Grade = points/possible points (15)				

Approved: Initials/date

Approved: Initials/date