

# DENTAL HYGIENE CARE I (DHYG 2301.1A1)

## CREDIT

3 Semester Credit Hours (3 hours lecture)

## MODE OF INSTRUCTION

Face to Face/ Hybrid

## PREREQUISITE/CO-REQUISITE:

Prerequisite: Admittance to the dental hygiene program and DHYG 1301, DHYG 1431, DHYG 1304, DHYG 1227

Co-Requisite: DHYG 1260, DHYG 1219, DHYG 1235, DHYG 1207

## COURSE DESCRIPTION

Dental hygiene care for the medically or dentally compromised patient including supplemental instrumentation techniques

## COURSE OBJECTIVES

Assess various patient needs; formulate a treatment plan for the medically and/or dentally compromised patient; and describe supplemental instrumentation techniques.

## INSTRUCTOR CONTACT INFORMATION

Instructor:	Lori Rogers, RDH, BS
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Office Phone:	409-247-5159
Office Location:	MPC 210
Office Hours:	Monday 1-3, Wednesday 1-3, Friday 8-9 am (or by appointment)

## REQUIRED TEXTBOOK

- Boyd, Linda D., Mallonee Lisa F., Wyche Charlotte J., (2021). *Wilkins' Clinical Practice of the Dental Hygienist* 13<sup>th</sup> ed., Jones & Bartlett Learning, LCCN: 2019917179
- Neild-Gehrig, J. (2021). *Fundamentals of Periodontal Instrumentation and Advanced Root Instrumentation* (8<sup>th</sup>ed.). Jones & Bartlett Learning, LCCN: 2015037519
- Neild-Gehrig, J. (2013). *Patient Assessment Tutorials* (4th ed.). Philadelphia: Wolters Kluwer Health/Lippincott, Williams, Wilkins. ISBN: 978149633500

## REFERENCES

- DeLong, L. A. & Burkhart, N. B. (2013). *General and oral pathology for the dental hygienist* (2<sup>nd</sup> ed.). Baltimore, MD: Wolters Kluwer Health/ Lippincott Williams & Wilkins
- Pickett, F. & Gurenlian, J. (2010). *Preventing medical emergencies: Use of the medical history* (3<sup>rd</sup> ed.). Philadelphia: Wolters Kluwer Health/ Lippincott Williams & Wilkins



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**COURSE CALENDAR**

Date	Topic	Reading Material/Assignment
Week 1	Syllabus	DHYG 2301 Syllabus *Weather Dismissal-No class
	Emergency Care	Wilkins Ch-9 WB Ch-9 Due 1-23
Week 2	Emergency Care	Wilkins Ch-9, training scenarios
	The Pediatric Patient	Wilkins Ch-47 WB Ch-47 Due 1-30
Week 3	The Pediatric Patient	Bb PowerPoint Discuss the Pedo Competency & clinic forms
	Family Violence	Wilkins Ch-14 WB Ch-14
Week 4	Research Paper website:www.purdueowl.com	Library Speaker ( <u>Not on the Exam</u> )
	<b>Exam 1</b>	<b>Online: Syllabus Info, Wilkins Ch-9, Ch-14, Ch-47</b>
Week 5	The Patient with an Endocrine Condition	Wilkins Ch-53
	The Patient with an Endocrine Condition	Wilkins Ch-53 WB Ch-53 Due 2-20
Week 6	The Pregnant Patient and Infant	Wilkins Ch-46
	The Patient with Diabetes Mellitus	Assignment: <u>Dentalcare.com</u> Diabetes: A Multifaceted Syndrome with Treatment Considerations Due: 2/27
Week 7	The Patient with Diabetes	Wilkins Ch-54

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	<b>Exam 2</b>	<b>Online Wilkins Ch-46, Ch-53, Ch-54</b>
Week 8 <b>Research Paper Outline Due!</b>	The Patient with Dental Implants	Wilkins Ch-31 Guest Speaker <b>Research Paper Outline Due!</b>
	The Older Adult Patient	Wilkins Ch-48 WB Ch-48 Due:3-19
<b>Spring Break</b>		
Week 9	Tobacco Cessation Counseling	PAT Module 11
	Care of the Dental Prosthesis	Wilkins Ch-30 (Not on the Exam) WB Ch-30 Due: 3-26
Week 10	The Patient with a Cardiovascular Disease	Wilkins Ch-61
	<b>Exam 3</b>	<b>Wilkins PAT Module 11, Ch-31, Ch-48, Ch-61</b>
Week 11	The Patient with a Blood Disorder; HIV/AIDS	Wilkins Ch-62 Wilkins pgs. 75-79
	The Patient with a Blood Disorder	Wilkins Ch-62 WB Ch-62
Week 12	Working with Special Needs Patients	Guest Speaker
	Work on Research Paper	<b>Research Paper Due! @11:59pm</b>
Week 13	The Patient with Cancer	Wilkins Ch-55
	The Patient with Cancer	Wilkins Ch-55 WB Ch-55 Due: 4-23

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<b>Week 14</b>	<b>Exam 4</b>	<b>Wilkins Ch-62, Ch-5</b>
	Research Presentations	Order of Presenters TBA
Week 15	Research Presentations	Order of Presenters TBA
	<b>Final Exam</b>	<b>On Campus!</b>

## COURSE POLICIES

### Attendance Policy

#### 1. Absenteeism

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

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.** The student is responsible for all material missed at the time of absence. Extenuating circumstances will be considered 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.

##### b. Summer Sessions:

Dental hygiene students will be allowed **one excused absence** 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:

1 absence = notification in Starfish

Beginning with the 2<sup>nd</sup> 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 absences.

### Tardiness

Tardiness is disruptive to the instructor and the students in the classroom. It is expected that

students will arrive on time for class, clinic or lab, and remain until dismissed by the instructor. If tardiness becomes an issue, the following policy will be enforced:

Tardy 1 time = notification in Starfish

Tardy 2 times = is considered an 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.**

**2. Disabilities Statement.** The Americans with Disabilities Act of 1992 and Section 504 of the Rehabilitation Act of 1973 are federal anti-discrimination statutes that provide comprehensive civil rights for persons with disabilities. Among other things, these statutes require that all students with documented disabilities be guaranteed a learning environment that provides for reasonable accommodations for their disabilities.

If you believe you have a disability requiring an accommodation, please contact the Special Populations Coordinator at (409) 880-1737 or visit the office in Student Services, Cecil Beeson Building.

You may also visit the online resource: <http://www.lit.edu/depts/stuserv/special/defaults.aspx>.

### **3. 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](http://www.lit.edu) or obtained in print upon request at the Student Services Office. Please note that the online version of the *LIT Catalog and Student Handbook* supersedes all other versions of the same document.

### **4. Technical Requirements (for Blackboard)**

The latest technical requirements, including hardware, compatible browsers, operating systems, software, Java, etc. can be found online at: [https://help.blackboard.com/en-us/Learn/9.1\\_2014\\_04/Student/015\\_Browser\\_Support/015\\_Browser\\_Support\\_Policy](https://help.blackboard.com/en-us/Learn/9.1_2014_04/Student/015_Browser_Support/015_Browser_Support_Policy). A functional broadband internet connection, such as DSL, cable, or WiFi is necessary to maximize the use of the online technology and resources

### **5. 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.

## 6. Electronic Devices

Electronic devices are a part of many individual's lives today. Devices such as tape recorders, radios, cell phones, paging devices and laptop computers, however, may be disturbing to faculty and classmates. Students, therefore, must receive the instructor's permission to operate all electronic devices in the classroom and clinic. Texting on cell phones or computers will not be allowed during class or clinic.

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.

## 7. Assignment, 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 physician's 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.

Students must use their personal equipment, such as computer, MacBook, laptop, iPad, to take their exams and must not use their classmates'. School computers may be used if personal equipment is not available. Respondus Lockdown Browser and Respondus Monitor will be used for examinations therefore, a webcam is required to take the exam. 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](mailto: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, use of A.I., 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, the student will receive a zero for the exam and will receive disciplinary action. This policy applies to assignments and quizzes.

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.

### **8. Mandatory Remediation**

Remediation is mandatory after a student fails a major exam. The student must complete remediation within 2 weeks after the failed exam.

Each day of class, students are expected to come prepared for the lecture, discussion or the planned activity scheduled for that day. This includes any assignments which have been given verbally or listed in the schedule. Due to the progressive nature of this course, lack of, or failure to prepare for class may lead to eventual difficulties or perhaps failure. Excessive lack of preparation will necessitate a discussion with the instructor.

Lecture is one hour and fifteen minutes each week, (T-on campus, TH-Online), for approximately fourteen weeks.

Each class day material will be covered in lecture sessions. All topics cannot always be discussed in detail in class and the student is expected to complete the unaddressed objectives. Any problems or questions with objectives or material should be brought to the attention of the instructor.

#### Learning/Teaching Methods:

1. Lecture
2. Demonstration
3. Class Discussion
4. Guest Lectures
5. Internet assignments
6. Individual and Group Assignments

#### Course Requirements:

1. Four lecture exams; One comprehensive final exam
2. Prepare a typed outline and research paper. Create a PowerPoint presentation to be presented to the class and instructors.
3. Completion of all assigned Workbook pages
4. Begin to develop an acceptable portfolio with journaling assignments

#### Evaluation Criteria:



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Lecture Grade Distribution:

80%	4 Major Exams
10%	Completion of all WB Assignments
10%	Research Paper and Presentation

\*The portfolio journaling assignments are graded separately and are not part of the overall grade for this course.

Grading Scale:	92 - 100 = A
	83 - 91 = B
	75 - 82 = C *
	67 - 74 = D
	0-67 = F

\*This course must be completed earning a grade of 75 or better.

Content Outline

I. Emergency Care

Emergency Preparedness

- a. Prevention of emergencies
- b. Patient Assessment
- c. Stress minimization
- d. Emergency materials
- e. BLS certification
- f. Documentation

II. Research Project written paper and presentation

- a. PowerPoint on public Speaking
- b. Purpose of public speaking
- c. Methods of delivery
- d. Preparation
- e. Instructions for assignment completion

III. Pedodontic Patient

- a. Pediatric Dentistry
- b. The child as a patient
- c. Patient management
- d. Components of the treatment
- e. Periodontal assessment
- f. Caries risk assessment
- g. Anticipatory guidance
- h. Treatment planning and consent
- i. Documentation

IV. Tobacco Cessation Counseling

- a. Tobacco products
- b. Types/ how used
- c. Components
- d. Metabolism of Nicotine
- e. Teratogenic effects of tobacco products
- f. Environmental smoke and effects
- g. Oral manifestations of tobacco product use.
- h. Systemic effects of tobacco products
- i. The five "A's"
- j. Pharmaceutical agents used to assist in tobacco cessation
- k. Cessation strategies and relapse prevention
- l. Role of the RDH in prevention and cessation

V. The Patient with an Endocrine Disorder

- a. Overview of the endocrine system
- b. Endocrine gland disorders

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- c. Specific gland and functions
  - d. Puberty
  - e. Women's health
  - f. Documentation
- VI. The Pregnant Patient and Infant
- a. Fetal development
  - b. Oral findings during pregnancy
  - c. Patient Care
  - d. Patient instruction
  - e. Referrals
  - f. Infant oral health
  - g. Documentation
- VII. The Patient with HIV/ AIDS
- a. Transmission
  - b. Testing
  - c. Oral manifestations
  - d. Treatment and Prevention
  - e. Patient management
  - f. Documentation
- VIII. The Patient with Cancer
- a. Description
  - b. Treatments
  - c. Mucositis management
  - d. Care Plan
  - e. Documentation
- IX. The Patient with Dental Implants
- a. Bone physiology
  - b. Osseointegration
  - c. Implant interfaces
  - d. Types of implants
  - e. Patient Selection
  - f. Evaluation for placement
  - g. Peri implant preventive care
  - h. Classification of implant disease
- X. The Patient with Diabetes Mellitus
- a. Definition and Impact
  - b. Oral health implications
  - c. Basics about insulin
  - d. Individuals at risk
  - e. Classification of diabetes
  - f. Diagnosis
  - h. Pharmacologic therapy
  - i. Complications

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- j. Care plan
- k. Documentation

XI. Care of the Oral Prosthesis

- a. Missing teeth
- b. The edentulous mouth
- c. Purpose for fixed or removable
- d. Fixed partial denture.
- e. Removable partial denture
- f. Complete denture prosthesis
- g. Obturator
- h. Marking for identification
- i. Professional care
- j. Patient self care
- h. Denture induced lesions
- j. Documentation

XII. The Patient with Cardiovascular Disease

- a. Classification
- b. Infective Endocarditis
- c. Congenital heart diseases
- d. Rheumatic heart disease
- e. Mitral valve prolapse
- f. Hypertension
- g. Ischemic heart disease
- h. Angina
- i. Myocardial infarction
- j. Heart failure
- k. Arrhythmia
- l. Lifestyle management for the cardiac patient
- m. Surgical treatment
- n. Antithrombotic therapy
- o. Documentation

XIII. The Patient with a Blood Disorder

- a. Normal blood
- b. Plasma
- c. Erythrocytes
- d. Leukocytes
- e. Thrombocytes
- f. Anemia
- g. Sickle cell disease
- h. Polycythemia
- i. Disorders of the white blood cells
- j. Platelet disorders
- k. Bleeding or coagulation disorders

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- I. Care Plan
- m. Documentation
- XIV. Research presentation
  - a. Using Current Research/Presenting to a Professional Audience
  - b. Parts of the research paper
  - c. APA format
  - d. Public speaking skills

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LEARNER OBJECTIVES  
EMERGENCY CARE

AT THE COMPLETION OF THIS UNIT, THE STUDENT SHOULD BE ABLE TO:

1. Define and use terminology used in emergency situations.
2. Describe the elements of an effective emergency protocol and explain how it could be used in a variety of emergency situations.
3. Briefly describe how the components of the Medical/Dental history and psychological evaluation play a major role in the prevention of medical emergencies.
4. List possible situations which would require medical consultation and determine specific patient information necessary for initiating a consultation.
5. Explain how the identification and management of stress is important in preventing medical emergencies. Discuss specific strategies for identification and management of stress in the dental office.
6. Describe the equipment that would constitute a basic emergency kit for a dental clinic.
7. Identify the minimum emergency medical training necessary for all dental staff members.
8. Describe the appropriate management of specific medical emergencies in response to given signs and specific symptoms.
9. Demonstrate knowledge of the Lamar Institute of Technology's Dental Hygiene Emergency protocol and state the location of the basic emergency equipment in the Dental Hygiene Clinic.
10. Identify the legal and ethical responsibility of the dental hygienist in responding to emergencies.
11. Describe what may happen to the vital signs during a medical emergency.
12. Describe the significance of practice drills in regards to emergency preparedness.
13. Describe how to assess a conscious and an unconscious patient.
14. Determine when to use basic life support during a dental emergency.
15. Describe protocols to be followed in specific dental emergencies.

LEARNER OBJECTIVES  
TOBACCO CESSATION COUNSELING

AT COMPLETION OF THIS UNIT THE STUDENT WILL BE ABLE TO:

1. Define terms associated with tobacco use and cessation.
2. Identify components of tobacco products.
3. Describe the metabolism of nicotine.
4. Describe the systemic effects of tobacco products, include gender specific information.
5. List diseases associated with tobacco use.
6. Define environmental smoke and list the related health effects.
7. Describe the in-utero effects of smoke and the effects of environmental smoke on infants and children.

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8. Describe the oral manifestations of tobacco use.
9. Describe the effects tobacco use has on periodontal treatment outcomes.
10. Discuss nicotine addiction and withdrawal.
11. Identify the types of and describe the use of pharmaceutical agents used to assist the individual in tobacco cessation.
12. Describe dental hygiene care and modifications for the patient who uses tobacco.
13. Describe the role of the dental hygienist in tobacco use prevention.
14. Discuss the five A's and the five R's of tobacco cessation.
15. Discuss the "Ask, Advise, Refer" campaign/program supported by the American Dental Hygienist's Association.
16. Describe how to follow through with patients to help them achieve non-smoker status.

LEARNER OBJECTIVES

THE PEDODONTIC PATIENT /FAMILY VIOLENCE

AT THE COMPLETION OF THE UNIT, THE STUDENT WILL BE ABLE TO:

1. Identify behaviors the dental professional wants to instill in the pedodontic patient.
2. Identify the age children should first be brought to the dentist and state the reason this age has been recommended by the American Academy of Pediatric Dentistry.
3. Describe the role of the dental hygienist in caring for the pediatric patient.
4. Discuss the role of the parent in caring for the child's teeth at different ages and identify what the parent might do to instill preventive behaviors in the child.
5. Identify possible treatment modifications which may have to be made to accommodate the pediatric patient. Visualize an entire appointment and determine how you would introduce operatory equipment, instruments and procedures in a non-threatening manner.
6. Provide examples of anticipatory guidance topics specific for children age birth to 24 months and 2 to 7 years.
7. List two examples of anticipatory guidance specific to oral health, nutrition, non-nutritive sucking, and trauma and injury to discuss with parents of children with special health care needs.
8. Discuss several methods of managing the dental hygiene care of a cooperative child, an anxious child, an uncooperative child.
9. Discuss selective polishing as it relates to the child patient.
10. Discuss the indications, contraindications, precautions and procedures for fluoride use during childhood.
11. Define child abuse/neglect.

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12. Discuss the dental hygienists legal and ethical responsibilities in recognizing and reporting child abuse.
13. List possible signs and symptoms of child abuse and neglect.
14. Define Early Childhood Caries (nursing bottle caries) and describe the clinical presentation.
15. Discuss the relationship of the maternal caries rate to an increased risk of Early Childhood Caries (ECC) in the child.
16. Discuss methods to decrease the risk of transmission of oral pathogens between parent and child.
17. Describe methods of preventing and treating Early Childhood Caries.
18. Determine the specific information necessary to conduct a thorough caries risk assessment for specific pediatric age groups.
19. Define the term “children with special health care needs.”
20. List two ways in which oral health professionals can prepare families for in-office oral health care.
21. List two oral conditions for which children with special health care needs may be at increased risk, and explain how to assess children to identify their risk.
22. Explain why some children with special health care needs may be at risk for child abuse and/or dental neglect.
23. Explain the concept of choosing the “least restrictive” behavior guidance technique.
24. Identify patient management techniques which might be necessary to achieve a successful patient experience.

## LEARNER OBJECTIVES

### THE PATIENT WITH AN ENDOCRINE DISORDER

#### AT THE COMPLETION OF THE UNIT THE STUDENT WILL BE ABLE TO:

1. Define puberty and adolescence.
2. Recognize the physical and emotional characteristics of adolescence.
3. Recognize oral health problems related to these periods of time.
4. Discuss the clinicians approach to the adolescent and compare this approach to the approach to a child and an adult.
5. Describe therapeutic oral hygiene care for the adolescent and pre-adolescent.
6. Describe how the medical/dental history should be obtained from the adolescent. Describe the legal implications.
7. List the dental implications associated with menstruation.
8. Define Menarche, Dysmenorrhea, Amenorrhea, and PMS.
9. List the contraindications for birth control pill use. List the side effects associated with birth control pill use. (Include dental side effects)
10. Identify appropriate patient education topics for this specific age group.
11. Define menopause.



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12. Describe what happens to the body during menopause.
13. Recognize some emotional problems which may arise during menopause.
14. List the effects menopause has on the body and the oral cavity specifically.
15. Suggest some appropriate patient education topics for this group of individuals.

LEARNER OBJECTIVES  
THE PREGNANT PATIENT AND INFANT

AT THE COMPLETION OF THE UNIT THE STUDENT WILL BE ABLE TO:

1. Define terms related to pregnancy.
2. Describe position modifications which must be made for the patient in her second and third trimester. Describe what may occur if the supine position is utilized.
3. Describe the oral findings one might expect to observe in the pregnant patient.
4. Describe the modifications indicated when radiographs are necessary for the pregnant patient.
5. Describe dental hygiene therapy and treatment modifications for the pregnant patient.
6. Suggest appropriate patient education topics for the pregnant patient.
7. Discuss modifications in DH care and patient education when treating a periodontally involved pregnant patient.
8. Recognize the signs and symptoms of specific medical emergencies associated with pregnancy, including: syncope, gestational diabetes, depression and pre/eclampsia.

LEARNER OBJECTIVES  
HIV INFECTION AND AIDS

AT THE COMPLETION OF THIS UNIT THE STUDENT WILL BE ABLE TO:

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4. Describe the disease stages of HIV infection and state the associated time period.  
Acute HIV infection  
HIV positive - latent infection  
AIDS
5. Identify diseases associated with AIDS or HIV infection.
6. Discuss the transmission of HIV and identify the major risk factors associated with the transmission of the disease.
7. Discuss the risk of HIV disease transmission in the dental office and in the health care industry in general.
8. Identify the major route of transmission of HIV disease in health care.
9. Describe methods to prevent HIV transmission.
10. Identify the oral manifestations of HIV infection and AIDS.
11. Describe what treatment modifications might be required before dental care if the patient has idiopathic thrombocytopenia purpura.
12. Describe the three types of HIV related Gingival/Periodontal disease and outline specific treatment procedures.  
HIV - Gingivitis - Linear erythema  
Necrotizing ulcerative gingivitis/periodontitis  
HIV-Periodontal disease
13. Identify the legal implications and ethical responsibilities surrounding the care of HIV+ and AIDS patients.
14. Discuss the current status of HIV vaccine development.
15. Identify methods for testing for HIV infection.

LEARNER OBJECTIVES

THE PATIENT WITH CANCER

AT THE COMPLETION OF THIS UNIT THE STUDENT WILL BE ABLE TO:

1. Discuss dental management prior to, during and following chemotherapy.
2. Discuss dental management of the oral complications of chemotherapy.
3. Discuss dental management prior to, during, and following head and neck radiation therapy.
4. Discuss dental management of the oral complications of head and neck radiation therapy.
5. Discuss the role of the dental hygienist in the early detection of oral cancer.
6. Identify the two prevalent forms of primary and adjunctive therapy for oral cancer.
7. Define and use terms related to cancer and cancer therapy.
8. List the specific effects of radiation and chemotherapy on children.
9. Discuss the possible oral and general effects of bone marrow transplants and possible interventions.
10. Discuss the role of the dental hygienist in cancer education and prevention.

LEARNER OBJECTIVES  
THE PATIENT WITH DENTAL IMPLANTS

AT THE COMPLETION OF THIS UNIT, THE STUDENT WILL BE ABLE TO:

1. Define oral rehabilitation and list the objectives for complete rehabilitation.
  2. List the possible procedures complete oral rehabilitation may encompass.
  3. Describe the clinical characteristics of the gingiva commonly found in conjunction with complete oral rehabilitation.
  4. Describe the possible effects certain fixed and removable prosthetic devices will have on the hard and soft tissues of the oral cavity.
    - Crowns
    - Fixed bridges
    - Splints
    - Removable partials
  5. Discuss plaque biofilm removal for problems areas associated with complete mouth rehabilitation. Given a case history, determine the appropriate plaque biofilm removal device/method for the stated problem.
  6. Explain the indications and contraindications for fluoride use for the patient with complete mouth rehabilitation.
  7. Describe the process for planning a disease control program for the patient with a completely rehabilitated mouth.
  8. Describe a possible maintenance program for the patient with a completely rehabilitated mouth.
  9. Identify and describe the types of dental implants.
  10. List indications and contraindications for the use of dental implants.
  11. Define osseointegration and name the attachment between the sulcular epithelium and the implant surface.
  12. Describe clinical procedures and the instruments used for implant maintenance.
  13. Describe specific home care techniques for maintaining implants.
  14. Identify factors that influence implant failure.
  15. Describe the role of the dental hygienist in the selection, assessment, treatment, and education of the implant patient.
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6. Select appropriate tips for use according to patient characteristics.
  7. Demonstrate correct technique.

LEARNER OBJECTIVES  
THE PATIENT WITH DIABETES

UPON COMPLETION OF THIS UNIT, THE STUDENT WILL BE ABLE TO:

1. Describe the disorders classified as diabetes mellitus.
2. Compare and contrast Type I diabetes and Type II diabetes.
3. Define terms relating to the signs and symptoms of diabetes.

4. Compare and contrast hypoglycemia and ketoacidosis.
5. List the possible long term effects of diabetes and describe possible methods of decreasing the risk of developing these disabilities and diseases.
6. Describe the effect diabetes has on an individual's ability to fight infection.
7. Describe the basic diabetic diet and its relationship to dental health.
8. Describe significant oral findings related to diabetes.
9. Identify questions on the medical/dental history related to diabetes and prepare appropriate follow-up questions to investigate the individual's condition fully.
10. Describe possible treatment modifications for the diabetic patient.
11. Describe when and why a medical consultation might be necessary for a diabetic patient.
12. Describe what topics related to diabetes should be emphasized during oral health education.
13. Describe how one would manage a diabetic emergency in the dental clinic.
14. Describe the purpose of the hemoglobin A<sub>1</sub>C test and how you can use the test in preparing for patient care.
15. Describe the association between increased diabetic retinopathy and the progression of clinical attachment loss.

#### LEARNER OBJECTIVES

##### CARE OF THE PROSTHESIS

##### AT COMPLETION OF THIS UNIT THE STUDENT WILL BE ABLE TO:

1. Identify some of the factors involved in the aging process.
2. Identify the main body systems which undergo change as a result of aging. Discuss the changes in these systems and some ways to prevent or slow these changes.
3. Identify specific chronic diseases associated with the elderly population at this time.
4. Discuss the psycho-social needs of the elderly. Describe how the dental team can help meet these needs.
5. Identify the major classifications of drugs, commonly taken by the elderly, which cause xerostomia.
6. Briefly describe the sensory changes which occur in the elderly.
7. Briefly describe the oral changes which may occur in the elderly and identify those related to aging and those not related to aging.
8. Identify the most common dental needs of the elderly.
9. Describe treatment modifications which may be necessary for the elderly.
10. Determine the specific preventive services generally needed in the elderly population.
11. Describe modifications which can adapt oral hygiene aids for use by the elderly population.
12. Describe strategies to help the dental hygienist educate the elderly.
13. Describe how diet and nutritional changes may affect the oral health of the elderly and the reverse.
14. Discuss demographic trends in the aging population which are impacting the practice of dentistry.

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15. Describe the possible role of the dental hygienist in the diagnosis and treatment of burning mouth syndrome (BMS).
16. Describe the role of the dental hygienist in the diagnosis and treatment of xerostomia in the elderly patient.
17. Describe the role of the dental hygienist in identifying and reporting suspected elder abuse.
18. Define osteoporosis.
19. List the following: risk factors for osteoporosis, methods for diagnosing osteoporosis and treatment alternatives.
20. Describe the role of the dental professional in obtaining appropriate referrals for patients at risk for osteoporosis.
21. Discuss the possible oral implications of osteoporosis.
22. Describe denture related oral changes, denture induced oral lesions and how to prevent or minimize their occurrence.
23. List instructions on use of the denture and home care to be given to a patient being given complete dentures.
24. Describe dental hygiene care and maintenance of the edentulous patient.

## LEARNER OBJECTIVES

### THE PATIENT WITH CARDIOVASCULAR DISEASE

#### AT COMPLETION OF THIS UNIT THE STUDENT WILL BE ABLE TO:

1. Identify and define terms used in cardiovascular diseases.
2. List specific strategies to prevent cardiovascular diseases.
3. Identify the specific bacteria associated with rheumatic fever.
4. List the symptoms of rheumatic heart disease.
5. Identify the dental implications associated with the following conditions/diseases:
  - a. current anticoagulant therapy
  - b. hypertension
  - c. angina pectoris
  - d. myocardial infarction
  - e. sudden death
  - f. congestive heart failure
  - g. cardiac pacemaker
  - h. cardiac surgery
6. Describe each of the following as it pertains to infective endocarditis:
  - a. etiology
  - b. predisposing factors
  - c. disease process
  - d. subsequent effects
  - e. prevention
  - f. patient education
7. List ways to help prevent cardiovascular disease.

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8. Describe how periodontal disease and cardiovascular disease may be related.
9. Describe the role of the dental hygienist in education the patient about the relationship of oral conditions to cardiovascular health.

LEARNER OBJECTIVES

THE PATIENT WITH A BLOOD DISORDER

AT COMPLETION OF THIS UNIT THE STUDENT WILL BE ABLE TO:

1. List the oral findings which might indicate a blood disorder.
2. Identify and define terms used in hematology.
3. Identify the normal range of values for the following tests:
  - a. hemoglobin
  - b. hematocrit
  - c. clotting time
  - d. prothrombin time
4. Identify the conditions which an increase or decrease in these normal values might indicate.
5. Identify the dental complication associated with administration of a liquid oral ferrous iron supplement and state a possible solution.
6. Identify the dental implications and possible treatment modifications associated with the following diseases/conditions:
  - a. folate deficiency anemia
  - b. pernicious anemia
  - c. anemia
  - d. sickle cell anemia
  - e. polycythemia
  - f. leukopenia/leukocytosis
  - g. bleeding disorders
7. Describe possible bleeding abnormalities associated with NSAIDs and anticoagulation drugs and how treatment might have to be modified.
8. Identify what the INR is and its significance.
9. Describe methods to stop excessive/prolonged bleeding during periodontal therapy.



Appendix 1  
Instructions for Research Paper and Presentation



**OUTLINE REQUIREMENTS:** The outline will include the following:

- A. An introduction that explains the purpose for the research project and/or what the students hope to accomplish by presenting the research project. How will the information benefit the practicing clinician?
- B. An outline of all main topics to be covered in the research paper/project with a very brief explanation of the information contained in each topic area or an explanation of the direction the students are taking with the particular topic area.
- C. A statement describing how the students hope to use visual aids in achieving the purpose of the research project.

**WRITTEN PAPER REQUIREMENTS:**

- A. Follow the outline previously submitted by the student
  - B. Have a minimum of grammatical and spelling errors
  - C. Begin with an introduction which states the purpose of the paper/research project
  - D. Be organized in paragraph structure beginning with an appropriate introductory sentence and ending with a conclusion or transitional sentence. Each main point should be fully explained.
  - E. End with a conclusion that summarizes the important points of the paper, suggests topics for further research and any other information the student feels appropriate
  - F. Use the APA style for in-text citations and reference page. Papers submitted without in-text citations will be returned to the student with a grade of "0". If you do not understand or have never used in-text citations consult the writing center in the Lamar University Library
  - G. Have at least five current references (no older than five years)
  - H. At least four of the current references must be from **peer reviewed\*** journals not websites.
- \* Peer reviewed journals have a review board that checks all of their article submissions for accuracy. You will usually find a statement on the page containing the publication information attesting to this practice. If you are in doubt ask your librarian. If you are searching data bases at the library be sure to check the "Only Peer Reviewed" option.

**Miscellaneous Information concerning the research project:** The research project provides you

with an opportunity to expand your knowledge in a special area of interest and to arouse the curiosity and awareness of others in your profession through your energy and creativity. The research project is 10% of your final grade; make sure you give it the time it deserves.

- A. The successful project requires inclusion of timely, useful, and accurate information presented in an original and interesting manner.
- B. The subject should be current and of general interest. The presentation should be simple, direct, and full of action.
- C. It is important to clearly understand your subject:
  - a. Know what you are doing and why
  - b. Have accurate information with documentation available
  - c. Be prepared for controversy (Pro and Con)
  - d. Research the topic thoroughly
  - e. Use clear examples and demonstrations
- D. Length of the presentation is usually 7 - 10 minutes (NO shorter or longer)
- E. Speech should be clear and distinct. You should have a smile in your voice. The presentation should not sound memorized or read.
- F. **You will not have access to any written notes or notecards to refer to during the presentation. Significant points will be lost if you read your presentation from the slides without explaining or elaborating on the information during your presentation.**
- G. The uniform for your class is the required attire for the presentation. Make sure you follow **all dress requirements** for clinic, including: acceptable hair style, and jewelry. You do not need to wear a lab coat or your clinic shoes; however, sandals and flip flops are not acceptable.
- H. Introduce yourselves and state the purpose of your presentation
- I. Practice the research project and encourage an audience to constructively criticize your presentation before the actual presentation is given.
- J. Some problems encountered during past years include:
  - a. Talking too fast
  - b. Talking too softly
  - c. Not looking at the audience
  - d. Fidgeting and swaying from side to side
  - e. Reading off cards
  - f. Not referring to your PP slides
  - g. Talking to the PP slides instead of your audience
  - h. Arguing about who should answer a question
  - i. One partner looks totally bored and uninterested while the other presenter speaks

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<b>First Year Research Project Evaluation</b>			
<b>Written Report and Handouts</b>			
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. P4. Communicate effectively with individuals and groups from diverse populations both verbally and in writing.		
Student Name(s)			
Presentation Title			
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
OUTLINE			
1.	Introduction	5	
2.	Main topics are briefly described	10	
3.	Type of visual aids are described	5	
WRITTEN PAPER			
4.	Introduction describes the topic and purpose of the project	10	
5.	Topic was thoroughly defined and discussed	10	
6.	Topic scope and depth is appropriate	10	
7.	Topic information is accurate and current	10	
8.	Describes how the topic is related to the practice of dental hygiene	10	
9.	Future research/information needs are identified	5	
10.	Information is organized in a logical and effective sequence	5	
11.	Grammar is correct throughout the report	10	
12.	Reference requirements are met	5	
15.	References and body of the paper follow the APA guidelines	5	
	Total Points	100	
Comments:			

<b>GRADING RUBRIC FOR RESEARCH PROJECT PRESENTATIONS (Instructor Evaluation)</b>				
LIT Competency Statement:				
P2. Assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care.				
P4. Communicate effectively with individuals and groups from diverse populations both verbally and in writing.				
Area of Evaluation	Unacceptable (0-1 points)	Good (2-3 points)	Excellent (4-5 points)	Total
1. Content				

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A. Purpose	Neither the purpose nor how the presentation relates to the practice of dental hygiene/dentistry is clearly defined.	Either the purpose of the presentation or how it relates to the practice of dental hygiene/dentistry is clearly defined, but not both.	The purpose of the presentation and how it is related to the practice of dental hygiene/dentistry is clearly defined.	
B. Scope and Depth	The scope and depth of the presentation allows for basic coverage of the topic but not at a professional level.	The scope and/or depth of parts or all of the presentation does not allow the topic to be covered comprehensively at a professional level.	The scope and depth of the presentation allows the topic to be presented comprehensively at a professional level.	
C. Current and Accurate	Information is outdated or inaccurate in four or more areas.	Information is outdated and/or inaccurate in more than two areas.	The majority of the information is both current and accurate.	
D. Organization	The majority of the information does not follow a logical sequence and the audience has difficulty following the presentation.	Most of the information is presented in a logical sequence, but inconsistencies noticeably affect how well the audience follows the presentation.	The information is presented in a logical, interesting sequence the audience can follow easily.	
<b>2. Text and Graphics</b>				
A. Overall Visual Appeal	Slides are confusing, image and text elements are not related to each other or to the topic and do not aid the audience in understanding the topic.	There are too many or too few photos or other images and some of the slides are hard to read and understand.	Appropriate photos and other images are included and the slides are easy to read and understand.	
B. Text	There are many errors in spelling, grammar and punctuation. Bullet format is not consistent or clear. Too much information on many slides.	There are some errors in spelling, grammar and punctuation. Bullet format is not consistent on a few slides. Too much information on at least two slides.	There are no errors in spelling, grammar and punctuation. Bullets are consistent and clear. Information is clear and concise on each slide.	
<b>3. Presentation</b>				
A. Knowledge of Subject	The presenters demonstrate minimal knowledge of the subject. The presentation stopped more than 3 times so the presenters could get back on topic. The presenters did not explain or elaborate on the majority of the slides in the presentation; most of the slides were just read.	Presenters do not appear comfortable with their information. The presentation stopped 2 to 3 times so the presenters could get back on topic. Material in the slides is not consistently explained and elaborated on during the presentation, some slides are just read.	Presenters demonstrate an appropriate level of knowledge of the topic and progress smoothly through the presentation enhancing the material being presented. Material in the slides is fully explained and elaborated on during the presentation.	

Area of Evaluation	Unacceptable (0-1 points)	Good (2-3 points)	Excellent (4-5 points)	Total points
B. Questions	The presenters cannot answer questions which are appropriate for this level of knowledge.	The presenters cannot answer some questions which are appropriate for this level of knowledge.	The presenters answer most questions with accurate and complete explanations.	
C. Eye Contact	Both presenters consistently look at the	One presenter is unable to maintain eye contact or	The presenters maintain eye contact with the	

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	slides and are unable to maintain eye contact with the audience.	both presenters are looking at the slides about 50% of the time.	audience seldom looking at the slides.	
D. Speech	The presenters did not use a clear voice or pronounce terms correctly for most of the presentation. Many in the audience had difficulty hearing the presentation. Extensive use of disfluencies.	One or both presenters did not consistently use a clear voice or precise pronunciation of terms. Most of the audience could hear most of the presentation. Noticeable use of disfluencies.	The presenters use a clear voice and correct, precise pronunciation of terms. The audience is able to hear the presentation in all areas of the room. Little use of disfluencies.	
E. Demeanor	The presenters have major lapses in professional demeanor throughout the presentation.	The presenters have a few minor lapses but demonstrate professional demeanor throughout most of the presentation.	The presenters consistently demonstrated professional demeanor throughout the presentation.	
F. Dress Code	Major infractions in the LIT clinic dress code (sweaters, jackets, jewelry)	Minor infractions in the LIT clinic dress code (name tag, hair, colored tee shirts)	LIT clinic dress code followed	
G. Time	Research project is 3 or more minutes too short or too long.	Research project is 1 to 2 minutes too short or too long.	Research project is 7 to 10 minutes long.	
Comments:			<u>Presentation</u> 65 Possible Points	
			<u>Written Report</u> 100 possible points	
			Total Possible Points=165	
			Final Grade	

PEER EVALUATION FIRST YEAR RESEARCH PROJECTS  
PRESENTERS \_\_\_\_\_

<b>LIT Competency Statement:</b> <b>P2. Assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care.</b>		<b>P4. Communicate effectively with individuals and groups from diverse populations both verbally and in writing.</b>		18 possible points:	Score:
<b>Scale</b>	<b>2</b>	<b>1</b>	<b>SCORE</b>		
<b>Vocal Expressiveness</b> Measures the extent to which the voice ranges from monotonous to interesting and enthusiastic	Mixture of some interesting and enthusiastic and some monotonous	Monotonous			
<b>Vocal Clarity</b> Measures the distinctness of speech and pronunciation of words.	Generally clear	Unclear			
<b>Volume</b> Refers to the vocal volume of the speaker	Generally audible	Difficult to hear			
<b>Use of Disfluencies</b> Refers to the inappropriate use of "ah", uhm", or "you know" and others	Noticeable, minimal distraction	Major distraction, makes the listener have to work to understand the information			
<b>Eye Contact</b> Measures the degree to which the speaker maintains eye contact with the listeners	Displays some inconsistent eye contact/ reads from the PPT/notes often	Avoids eye contact reads from PPT or notes more often than not			
<b>Organization – Order</b> Refers to sequencing of information. No order is confusing while effective order helps listeners follow and anticipate ideas	Some order	No order			
<b>Purpose</b> The extent to which the purpose of the presentation is clear and the sub-points are related to this purpose	Purpose clear but the sub-points are occasionally not clearly related to the purpose	Purpose is unclear and the sub-points are generally not clearly related to the purpose			
<b>Support, Clarification and Documentation</b> Does the speaker provide proof, data and evidence sufficient to support and clarify the purpose and sub-points in the presentation	Reasoning is generally clear but there are minor points that are not supported in the presentation	Reasoning is generally unclear and the purpose of the presentation is not thoroughly supported			
<b>Language Skills</b> To what extent does the presenter use appropriate professional language with few discernible grammatical errors	Occasionally uses inappropriate terms and has some minor, noticeable grammatical errors	Unprofessional terminology used consistently, grammatical errors noticeable and distract from the presentation and the listeners ability to follow the presentation			

LIT Competency Statement:

P3: Continuously perform self-assessment for lifelong learning and professional growth.

### **Self-Evaluation**

Write a brief paragraph describing your contributions to the Freshman Research Project. What strengths and weaknesses did you discover while developing this paper and presentation? Describe any difficulties you had participating in this group project (where do you think you did not do your share of the work or carry your weight?). What did you do to improve your performance? How do you rate your contribution to each stage of the project: outline, research, writing the paper, and development of the power point and classroom presentation?

### **Partner Evaluation**

Write a brief paragraph describing your partner's contributions to the Freshman Research Project. What strengths and weaknesses did your partner display while developing this paper and presentation? Describe any difficulties you had working with your partner in this group project. How did you overcome these difficulties? How do you rate your partner's contribution to each stage of the project: outline, research, writing the paper, and development of the power point and classroom presentation?

**\*This portion of the assignment should be submitted on Bb prior to your presentation.**

Grade Computation Sheet

Exam Average x .80 = \_\_\_\_\_

Research Presentation x .10 = \_\_\_\_\_

WB Completion x .10 = \_\_\_\_\_

Add for total points = \_\_\_\_\_

Final Letter Grade = \_\_\_\_\_

Grade Scale:

A = 92-100

B = 83-91

C = 75-82\*

D = 67-74

F = 0-66

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