

Dental Hygiene Care I

Lamar Institute of
Technology

DHYG 2301
Dental Hygiene Care
I
Spring 2018

Course Syllabus

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LECTURE SCHEDULE DHYG 2301

Date	Topic	Assignment
	Syllabus/Lab Manual/Research Project	Review Course Syllabus Partners for Research Project will be assigned Appendix 1 pg. 29 (syllabus)
	Emergency Care	Wilkins Ch-8
	Library Day	Meet at the library Rm 702 9:15-10:20
	The Pediatric Patient	Wilkins Ch-50 Paperwork for clinic procedures-on Bb/ Bring a copy
	Family Abuse and Neglect/ Research Project	Read: Wilkins Ch-62 Topics for Research Project due
	Tobacco Use	Wilkins Ch- 34 Pgs. 547-555
	Tobacco Cessation Counseling	Wilkins Ch-34 Pgs. 556-567
	Exam 1	
	The Patient with an Endocrine Disorder or Hormonal Change	Wilkins Ch-52
	The Pregnant Patient and Infant	Wilkins Ch-49
	Research	Research Project Outline Due

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Date	Topic	Assignment
	The Patient with Cancer	Wilkins Ch-56
	The Patient with Diabetes Mellitus	Wilkins Ch-69 Pgs. 1163-1171
	The Patient Diabetes Mellitus	Wilkins Ch-69 Pgs. 1171-1180
	Exam 2	
	FMX Radiographic Evaluation/ PAN	Media Lab-1/2 of the class
	FMX Radiographic Evaluation /PAN	Media Lab-1/2 of the class
	Sun Fun Rest	Have Fun!
	The Patient with Dental Implants and Complete Oral Rehabilitation	Ch-33 Wilkins FPI online material 20b
	The Older Adult Patient	Wilkins- Chapter 53
	The Edentulous Patient	Wilkins Ch-54

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Date	Topic	Assignment
	Exam 3	
	The Patient with HIV/AIDS	Wilkins Ch-4 pg. 61-65 Reading Material on Bb
	The Patient with a Cardiovascular Disease	Wilkins Ch-67 Research Papers Due
	The Patient with a Blood Disorder	Wilkins Ch-68
	The Patient with a Blood Disorder	Wilkins Ch-68
	Exam 4	
	Research Presentation Practice Day	Copy of Handout for research presentation due Email to Mrs. Rogers- larogers@lit.edu Come prepared to practice your presentation
	Panoramic Radiographic Eval FMX	
	Panoramic Radiographic Eval FMX	
	Research Project Presentations	Present to class and faculty-class will meet 9:00-11:00
	Research Project Presentations	Present to class and faculty-class will meet 9:00-11:00
*Note	Final Exam Day and Time TBA Finals week	Final Exam will be over a Case Study

**CONTEMPORARY DENTAL HYGIENE CARE I
DHYG 2301**

Course Description:

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

Course Goals:

Assess various patient needs; formulate a treatment plan for the medically and/or dentally compromised patient; and describe supplemental instrumentation techniques (*WECM 2011*).

More specifically:

1. Explain modifications in treatment for the medically and dentally compromised patients
 - a. The Pedodontic patient
 - b. The Patient with Hormone Change
 - c. The Patient using tobacco/cessation
 - d. The Pregnant patient
 - e. The Older patient
 - f. The Diabetic patient
 - g. The Cancer patient
 - h. The Patient with HIV/AIDS
 - i. The Patient with Cardiovascular disease
 - j. The Patient with a blood disorder
 - k. Edentulous patient
 - l. The Patient with oral rehabilitation and/or implants
2. Determine instrumentation techniques appropriate to meet the needs of a diverse patient population
3. Explain an appropriate plan of action when given or exposed to a specific medical/dental emergency
4. Communicate advanced knowledge of a current dental topic to the faculty and fellow dental hygiene students through the preparation and presentation of a research project.
5. Identify conditions associated with using tobacco and be able to outline a preliminary plan (The 5 A's) and provide support for tobacco cessation for the individual patient.

Prerequisite/Co-Requisite Courses:

Admittance to the dental hygiene program and all courses from the previous semesters

Credit Hours: 3 Credit Hours
Class Time: Tuesday and Thursday 9:30 - 10:45 Room 112
Instructor: Lori Rogers RDH BS
Office: Multi-Purpose Center Room 213

Course Policies:

1. **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.

If you are unable to attend lecture class, clinic or lab, it is mandatory that you call the appropriate instructor prior to the scheduled class, clinic or lab time. The student is responsible for all material missed at the time of absence. Extenuating circumstances will be taken into account. Extenuating circumstances might include: funeral of immediate family member, maternity, hospitalization, etc.

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

Fall/Spring Semesters:

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

2 absences = verbal warning

3 absences = written warning with the Disciplinary Action Form (DAF)

4 absences = grade will be lowered one full letter grade

- **Tardiness**

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

Tardy 1 time = verbal warning

Tardy 2 times is considered an absence.

2. **The Americans with Disabilities Act (ADA):**

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

3. **Examination and Quiz Policy:**

Quizzes and examinations will be based on goals and objectives, lecture notes, handouts, assigned readings, audiovisual material, and clinic experiences. 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. Should the student choose to miss a class for any reason other than those mentioned and miss an examination, a grade of "0" will be assigned for that examination.

- Make-up examinations be multiple choice or in the form of essay questions based on the learner objectives for the material covered in the applicable units.
- Students will not be allowed to make up quizzes.
- All examinations must be returned to the instructor to be kept on file. Students may have access to the examinations by appointment during the instructor's office hours for up to two weeks following an examination.

4. **Assignments:**

Assignments are to be submitted by 11:59 p.m. on the day they are due. Assignments will not be accepted if submitted late. A score of "0" will be recorded for all assignments not submitted due to absence on the due date unless prior arrangements are made with the instructor.

- All assignments are to be submitted via Blackboard unless otherwise stated.
- All work will be typed unless otherwise instructed. All work should be proof read

and spell checked. Grammar and readability count!

- Assignments may be submitted early. It is recommended you submit them as soon as they are completed. However, assignments will not be graded until the due date.
- **Care must be taken when submitting assignments on Blackboard. Please do not assume the assignment submission has been completed, you must follow up to make sure. The assignment properties will be set to send an email to the instructor when they are submitted. Contact the instructor to make double sure everything is received.**
- **Review your documents carefully before submitting them. Partially submitted assignments (including draft versions submitted in error) will be graded as submitted. If you discover your error you may submit the correct documents at any time prior to the deadline. If two documents are submitted the second submission will be assumed to be the correct submission unless otherwise indicated on the blackboard assignment submission page. You will not be allowed to complete or revise submitted assignments after the due date/time.**

5. **Electronic equipment:**

Electronic devices are a distraction and are not to be used during class sessions. Tape recorders, iPods (MP3 players), games and cell phones will be **turned off** during class times. If you are expecting an emergency call inform the instructor prior to class, put your phone on vibrate, and sit in an area where you will cause the least disturbance when leaving.

- Upon request the instructor may permit the use of laptop computers during class for taking notes, following lecture handouts and other classroom activities. This privilege may be withdrawn at any time by the instructor.
- Text messaging is not allowed at any time during class or laboratory sessions. Text messaging detracts from class participation and will result in deductions in your class participation grade. Students who do not comply with this policy may also be asked to leave for the remainder of the class.
- Use of electronic devices (i.e. phones, tablets) during a quiz or examination is considered academic dishonesty regardless of the subject or intent of the material. The student will receive a zero on the exam or quiz and may be subject to dismissal from the program.

Faculty has the authority to modify the above policies if appropriate.

Learning/Teaching Methods:

1. Lecture
2. Demonstration
3. Class Discussion
4. Guest Lectures
5. Internet assignments

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6. Individual and Group Assignments
7. Reading assignments

Required Texts:

1. Wilkins, E. (2017). *Clinical Practice of the Dental Hygienist* (12th ed.). Philadelphia: Lippincott Williams and Wilkins. ISBN: 978-1-4511-9311-4
2. Neild-Gehrig, J. (2017). *Fundamentals of Periodontal Instrumentation* (8th ed.). Philadelphia: Wolters Kluwer Health/ Lippincott Williams & Wilkins. ISBN: 9781496320209
3. Neild-Gehrig, J. (2013). *Patient Assessment Tutorials* (3rd ed.). Philadelphia: Wolters Kluwer Health/Lippincott, Williams, Wilkins. ISBN: 9781496320209

Reference Texts:

1. *Stedman's medical dictionary for the health professions and nursing* (7th ed.). Baltimore, MD: Wolters Kluwer Health/ Lippincott Williams & Wilkins
2. DeLong, L. A. & Burkhart, N. B. (2013). *General and oral pathology for the dental hygienist* (2nd ed.). Baltimore, MD: Wolters Kluwer Health/ Lippincott Williams & Wilkins
3. Pickett, F. & Gurenlian, J. (2010). *Preventing medical emergencies: Use of the medical history* (3rd ed.). Philadelphia: Wolters Kluwer Health/ Lippincott Williams & Wilkins

Course Requirements:

1. Prepare a written research paper with a PowerPoint and handouts to present to the class and instructors.
2. Class Participation: Participate in classroom discussions and activities
3. Begin to develop an acceptable portfolio

Evaluation Criteria:

Lecture Grade Distribution:

10%	Research Paper & Presentation
80%	4 Major Exams
10%	Final Exam

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.

DHYG 2301 Content Outline

LECTURE TOPIC

- I. Emergency procedures
 - A. Statistics
 - B. Office preparation
 - 1. Emergency kit
 - 2. Personnel roles
 - C. Tools for preventing emergencies
 - 1. Medical and dental history evaluation
 - 2. Physician consultation
 - 3. Stress reduction
 - D. Identification of emergency situations
 - E. Protocols for specific emergencies both medical and dental
 - F. Legal and ethical responsibility of the RDH in Texas when responding to emergencies

- II. Research project written paper and presentation

- III. Pedodontic patient
 - A. Risk factors for caries and gingivitis
 - B. Anticipatory guidance
 - 1. Parent and child education strategies
 - 2. Role of the parent at different ages
 - 3. Dentistry for specific age groups
 - C. Behavior modification
 - D. Early childhood caries
 - 1. Prevention
 - a. Relationship to maternal caries
 - b. Fluorides
 - 2. Treatment
 - E. Habits
 - 1. Recognition
 - 2. Treatment options
 - F. Periodontal diseases
 - 1. Recognition
 - 2. Etiology
 - 3. Treatment options
 - G. First visit to the dentist

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- H. Treating children with special healthcare needs
 - I. Child Abuse, neglect and maltreatment
 - 1. Signs and symptoms
 - a. Extraoral
 - b. Intraoral
 - 2. Legal and ethical responsibilities, including Texas State law
- IV. The patient who uses tobacco
- A. Tobacco products
 - 1. Types/ how used
 - 2. Components
 - 3. Metabolism of Nicotine
 - 4. Teratogenic effects of tobacco products
 - 5. Environmental smoke and effects
 - B. Assessment
 - 1. Oral manifestations of tobacco product use.
 - 2. Systemic effects of tobacco products
 - a. Addiction
 - b. Withdrawal
 - B. Tobacco cessation protocol
 - 1. The five "A's" and 5 "R's"
 - 2. Pharmaceutical agents used to assist in tobacco cessation
 - 3. Cessation strategies and relapse prevention
 - C. Role of the RDH in prevention and cessation
- V. The pre-adolescent to postmenopausal patient
- A. Puberty and adolescence
 - 1. Physical changes
 - a. Nutrition
 - b. Secondary sexual characteristics
 - 2. Personality/psychological changes
 - 3. Oral environment
 - a. Caries
 - b. Periodontal disease
 - 4. Treatment
 - a. Legal implications
 - 1) Informed consent
 - 2) Minors
 - b. Treatment plans
 - 1) Assessment
 - 2) Risk factors
 - 3) Interventions

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5. Patient education
 6. Oral and perioral piercing
 - a. Types
 - b. Procedures
 - c. Complications
 - d. Aftercare/ maintenance
 - B. Adult female
 1. Treatment considerations
 2. Treatment considerations and oral implications of contraceptives and replacement hormone therapy
 3. Patient education
 - C. Menopause
 1. Physiology
 2. Possible oral manifestations
 3. Treatment modifications
 4. Patient education
 5. Osteoporosis
 - a. Oral manifestations
 - b. Treatment
- VI. The pregnant patient
- A. Fetal development
 - B. Physiologic and psychological changes in the mother
 - C. Possible oral problems during pregnancy
 1. Caries
 2. Periodontal disease
 3. Oral lesions
 4. Dental myths during pregnancy
 - D. Treatment modifications and treatment timing during pregnancy
 1. Patient positioning
 2. Radiographs
 3. Elective vs. emergency treatment
 - E. Periodontal infection and pre-term low birth weight babies
 - F. Medical emergencies associated with pregnancy
 - G. Patient education
- VII. The patient with HIV or AIDS
- A. Etiology, transmission and pathogenesis
 - B. Testing procedures for HIV
 - C. AIDS determining factors
 - D. Primary, secondary and tertiary prevention
 - E. Systemic manifestations of HIV and AIDS

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- F. Oral Manifestations
- G. Basic therapy for oral and systemic manifestations of HIV and AIDS
- H. Treatment modifications for the patient with HIV or AIDS
- I. Patient education
- J. Progress on vaccine development
- K. Legal and ethical issues in HIV

VIII. The patient with oral cancer

- A. Background information
 - 1. Incidence
 - 2. Etiology and predisposing/risk factors
- C. Types of cancer therapy
 - 1. Surgery
 - 2. Radiation
 - 3. Chemotherapy
- D. Patient education
- E. Oral effects of radiation and chemotherapy specific for children
- F. Dental hygiene care and radiation therapy
 - 1. Pre-radiation
 - 2. During therapy
 - 3. Post- therapy
- G. Dental hygiene care and chemotherapy
 - 1. Pre-chemotherapy
 - 2. During therapy
 - 3. Post-therapy
- H. Oral complications of radiation and chemotherapy
- I. Bone marrow transplants and oral implications

IX. The patient with implants and complete mouth rehabilitation

- A. Dental Implants
 - 1. Types of implants
 - 2. Patient selection criteria
 - 3. Placement procedures
 - 4. The successful implant
 - 5. Assessment procedures
 - 6. Professional maintenance procedures
 - 7. The failing implant
- B. Complete rehabilitation
 - 1. Objectives
 - 2. Types of procedures
 - a. Fixed and removable prostheses
 - b. Splints

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- c. Implants
 - 3. Dental hygiene care
 - 4. Homecare
 - 5. Patient education
- XI. The patient with diabetes
- A. Etiology and pathogenesis of diabetes
 - B. Types and diagnostic procedures
 - C. Interventions to control diabetes
 - 1. Medical treatment
 - a. Drug therapy
 - b. Others
 - 2. Lifestyle and diet modifications
 - D. Systemic complications
 - E. Methods of assessing disease control
 - F. Oral implications
 - G. Dental treatment modifications
 - H. Diabetic emergencies
 - 1. Prevention
 - 2. Treatment
- XII. The older adult patient
- A. Statistics
 - B. The aging process
 - 1. Systemic changes
 - 2. Oral changes
 - C. Aging and drug metabolism
 - D. Chronic conditions associated with the elderly
 - E. Dental needs of the elderly
 - F. Potential treatment modifications
 - G. Dental hygiene care
 - H. Homecare modifications
 - I. Elder abuse
 - 1. Recognizing signs and symptoms
 - 2. Reporting
 - J. Patient education
- XIII. The edentulous patient
- A. Oral assessment
 - 1. Hard and soft oral tissues
 - 2. Xerostomia

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3. Sensory
4. Oral pathology related to dentures
- B. Dental hygiene care
 1. Instructions for use
 2. Dental hygiene care and maintenance
 3. Homecare instructions

XIV. The patient with cardiovascular disease

- A. Dental implications and potential treatment modifications for the following conditions
 1. Congenital heart diseases
 2. Rheumatic heart disease
 3. Mitral valve prolapse
 4. Infective endocarditis
 5. Hypertension and hypertensive heart disease
 6. Ischemic heart disease
 - a. Angina pectoris
 - b. Myocardial infarction
 - c. Congestive heart failure
 - d. Sudden death
 7. Pace makers
 8. Anticoagulant therapy
 9. Cardiac surgery
- B. Periodontal infections and cardiovascular diseases
- C. Patient education

XV. The patient with a blood disorder

- A. Normal and abnormal blood test values and what they indicate
- B. Dental implications and dental hygiene treatment modifications for specific blood disorders
 1. Iron deficiency anemia
 2. Pernicious anemia
 3. Folate anemia
 4. Sickle cell disease
 5. Polycythemia
 6. Leukopenia
 7. Leukocytosis
 8. Bleeding disorders
- C. Anticoagulation therapy and the International Normalized Ratio
- D. Methods for hemostatic control

LEARNER OBJECTIVES

**LEARNER OBJECTIVES
EMERGENCY PROCEDURES**

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
THE PATIENT WHO USES TOBACCO**

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.
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

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 HORMONE CHANGE

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.

LEARNER OBJECTIVES
THE MENOPAUSAL AND POSTMENOPAUSAL PATIENT

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

1. Define menopause.
2. Describe what happens to the body during menopause.
3. Recognize some emotional problems which may arise during menopause.
4. List the effects menopause has on the body and the oral cavity specifically.
5. Suggest some appropriate patient education topics for this group of individuals.

LEARNER OBJECTIVES
THE PREGNANT PATIENT

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:

1. Define acquired immunodeficiency syndrome.
2. Describe the virus responsible for HIV infection.
3. Identify which cells of the immune system are targeted by the HIV virus. Describe the significance of the CD4 cells in the body's immune response. Identify normal levels of CD4 cells. Identify the level at which clinical signs of HIV infections surface. Identify the level at which AIDS becomes apparent.

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
DENTAL IMPLANTS AND COMPLETE ORAL REHABILITATION

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.
-
6. Select appropriate tips for use according to patient characteristics.
 7. Demonstrate correct technique.

LEARNER OBJECTIVES
DIABETES AND ORAL HEALTH

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

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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_{1C} 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
THE OLDER AND EDENTULOUS PATIENT

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.

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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.
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

CARDIOVASCULAR DISEASES

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.
 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
BLOOD DISORDERS

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 Project

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 see the instructor BEFORE the paper is due.**
 - 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 or refereed 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.**

HANDOUT REQUIREMENTS: Printed outlines or handouts (Class presentation 40 copies)

- A. The front of the handout will contain the names of the student presenters, that they are dental hygiene students and the name of the school and program. Example:

USING ERGONOMICS WHEN PERFORMING AN ORAL PROPHYLAXIS

PRESENTED BY

SALLY SUE JOHNSON, DENTAL HYGIENE STUDENT

BILLY JOE BRADY, DENTAL HYGIENE STUDENT

**LAMAR INSTITUTE OF TECHNOLOGY
DENTAL HYGIENE PROGRAM**

- B. A brief outline of the presentation
C. List of references used for the project (APA format)
D. Any other information the students would like to include
E. The handouts should be attractive and professional looking. You do not have to have them printed in color or use expensive papers for the class presentation. You may decide to do something more for the public presentation in the fall.

Miscellaneous Information: 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: name tag, 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 questions
 - i. One partner looks totally bored and uninterested while the other presenter speaks
 - j. Useless outlines, no real information in the handout

*You must have permission to use video clips in your PowerPoint and I have to approve the material and length. Students sometimes put too much emphasis on the video portion.

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Contemporary Dental Hygiene Care I DHYG 2301			
First Year Research Project Evaluation			
Written Report and Handouts			
LIT Competency Statements	2.	Assume responsibility for dental hygiene actions and care based on accepted scientific theories and research as well as the accepted standard of care.	
	4.	Communicate effectively with individuals and groups from diverse populations both verbally and in writing.	
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		Date Submitted:	
1.	Introduction	5	
2.	Main topics are briefly described	10	
3.	Type of visual aids are described	5	
WRITTEN PAPER		Date Submitted:	
4.	Introduction describes the topic and purpose of the project	5	
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	5	
12.	Reference requirements are met and in-text citations are correctly used	5	
HANDOUT		Ready for presentation? Yes No	
13.	Correct format	5	
14.	Outline reflects written report	5	
15.	References follow the APA guidelines	5	
		Total Points	100
Comments:			

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GRADING RUBRIC FOR RESEARCH PROJECT PRESENTATIONS (Instructor Evaluation)				
Area of Evaluation	Unacceptable (0-1 points)	Good (2-3 points)	Excellent (4-5 points)	Total points
1. Content				
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.	
2. Text and Graphics				
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.	
3. Presentation				
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.	

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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 slides and are unable to maintain eye contact with the audience.	One presenter is unable to maintain eye contact or both presenters are looking at the slides about 50% of the time.	The presenters maintain eye contact with the 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:			Presentation 65 Possible Points	
			Written Report and Handouts 100 possible points	
			Total Possible Points=165	
			Final Research project Grade	

PEER EVALUATION FIRST YEAR RESEARCH PROJECTS

EVALUATOR _____

PRESENTERS _____

Scale	3	2	1	SCORE
Vocal Expressiveness Measures the extent to which the voice ranges from monotonous to interesting and enthusiastic	Interesting and enthusiastic	Mixture of some interesting and enthusiastic and some monotonous	Monotonous	
Vocal Clarity Measures the distinctness of speech and pronunciation of words.	Clear throughout	Generally clear	Unclear	
Volume Refers to the vocal volume of the speaker	Audible throughout	Generally audible	Difficult to hear	
Use of Disfluencies Refers to the inappropriate use of "ah", uhm", or "you know" and others	Seldom	Noticeable, minimal distraction	Major distraction, makes the listener have to work to understand the information	
Eye Contact Measures the degree to which the speaker maintains eye contact with the listeners	Involves listeners with eye contact minimal reading from PPT or notes	Displays some inconsistent eye contact/ reads from the PPT/notes often	Avoids eye contact reads from PPT or notes more often than not	
Organization – Order Refers to sequencing of information. No order is confusing while effective order helps listeners follow and anticipate ideas	Effective order	Some order	No order	
Purpose The extent to which the purpose of the presentation is clear and the sub-points are related to this purpose	Purpose is clearly stated and the sub-points are well related to the 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	
Support, Clarification and Documentation Does the speaker provide proof, data and evidence sufficient to support and clarify the purpose and sub-points in the presentation	Reasoning is clear and effective throughout	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	
Language Skills To what extent does the presenter use appropriate professional language with few discernible grammatical errors	Generally appropriate language with few 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	
Comments:			Possible points=27 Actual points=_____	

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?

Full credit evaluations will not only state the answers to the questions posed but will show analysis of the evaluation and reflection about what the student discovered about herself/himself during the project and evaluation process.

Appendix 2

Grade Computation

Grade Computation Sheet

Exam Average x .80 = _____

Research Presentation x .10 = _____

Final Exam 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.