

El Paso Community College

Syllabus

Part II

Official Course Description

SUBJECT AREA	<u>Dental Hygiene</u>
COURSE RUBIC AND NUMBER	<u>DHYG 1431</u>
COURSE TITLE	<u>Preclinical Dental Hygiene</u>
COURSE CREDIT HOURS	<u>4 2 : 8</u>
	Credit Lec Lab

I. Catalog Description

Provides foundational knowledge for performing clinical skills on patients with emphasis on procedures, and rationale for performing dental hygiene care. Introduces ethical principles as they apply to dental hygiene care. A grade of "C" or better is required in this course to take the next course. **Prerequisites: BIOL 2401 and BIOL 2402 and CHEM 1306 and 1106. Corequisites: DHYG 1103 and DHYG 1201 and DHYG 1219 and DHYG 1239 and DHYG 1304. (2:8). Lab fee. Professional Practice Insurance required.**

IV. Course Objectives

Upon satisfactory completion of the course, the student will be able to:

- A. Unit I - Professionalism
 - 1. Discuss the history of the dental hygiene profession.
 - 2. Discuss the meaning and scope of the American Dental Hygienists' Association Code of Ethics.
 - 3. Identify personal values priority
 - 4. Discuss the roles of the dental hygienist

- B. Unit II - Infection Control: Personal Protective Equipment
 - 1. Define the key words relative to infection control and the barriers for the clinician.
 - 2. Determine the basic schedule of immunizations, boosters, and immunizations for practice in dental hygiene.
 - 3. Discuss the procedure for reporting an exposure incidence.
 - 4. Identify the appropriate clinic attire and personal protection barriers for practice in the dental clinic.
 - 5. Compare the short standard handwash to the surgical scrub and determine when each is appropriate
 - 6. Discuss the proper procedure for handcare and gloving

- C. Unit III - Infection Control - Clinic Procedures
 - 1. Discuss the key words and abbreviations relative to infection control and clinical procedures
 - 2. Discuss the rationale for presoaking/precleaning instruments prior to placing them in the

- ultrasonic cleaner.
- 3. Discuss the purpose of the ultrasonic cleaner.
- 4. Describe the procedure for manual cleaning of instruments.
- 5. List the steps for packaging instruments for sterilization and summarize the process for recycling instruments.
- 6. List approved methods of sterilizing dental instruments and determine the method of operation for each.
- 7. Determine which materials are appropriate for sterilization in each method of sterilization.
- 8. Identify the advantages and the disadvantages of each method of sterilization
- 9. Identify the appropriate indicator for complete sterilization in each sterilizer.
- 10. Determine the proper care for the sterilizing machines in the EPCC Dental Hygiene Sterilization Room.
- 11. List recommended chemical disinfectants for use in the dental office and identify the criteria for use.
- 12. Identify which chemical disinfectants and sterilants are used in the EPCC Dental Hygiene Clinic
- 13. Discuss the rationale and the procedure for flushing the dental unit water and suction lines.
- 14. Discuss the consequences for noncompliance with EPCC Dental Hygiene Program Infection Control Policies

D. Unit IV - Infection Control: Transmissible Diseases

- 1. Define the key words and abbreviations relative to infection control and transmissible diseases
- 2. Identify the five mechanisms for the spread of disease and describe how to prevent each.
- 3. List the most common infectious diseases transmitted by way of the oral cavity, identifying the organism responsible and the method of transmission.
- 4. Identify the clinical activities that produce aerosols and splatter and determine the process for elimination or limitation of both.
- 5. Discuss the steps for precleaning and disinfecting environmental surfaces and preparing the dental unit for treatment of a patient.

E. Unit V - Dental Plaque and Other Soft Deposits

- 1. Define and explain the following types of soft deposits: acquired pellicule bacterial plaque, material alba and food debris.
- 2. Identify the stages in the formation of plaque and discuss each stage.
- 3. Describe what methods are valid in the detection of plaque.
- 4. Discuss the relationship of plaque and the formation of dental caries to include microorganisms, cariogenic and foodstuff sources
- 5. State the characteristics of material alba and how it forms.
- 6. State the methods for the removal of food debris.

F. Unit VI - Oral Infection Control: Toothbrushing and Flossing

- 1. Define the key terms appropriate to toothbrushes and toothbrushing.
- 2. Name and describe the three parts of a toothbrush.
- 3. Determine what factors influence toothbrushing selection for each patient.
- 4. Discuss general guidelines for teaching toothbrushing to a patient.
- 5. Identify and describe the three most common methods of toothbrushing used for patient instruction.
- 6. List and describe other acceptable toothbrushing methods and when they would be appropriate for use by the patient.

7. Discuss the purpose and procedure for tongue cleaning.
8. Determine the appropriate cleaning and daily care of toothbrushes:
9. Define the key terms appropriate to interdental care and chemotherapy.
10. Describe the procedure for flossing the teeth.
11. Discuss the appropriate interdental uses for tufted dental floss, knitting yarn, and gauze stripe.
12. Determine the indications for use of interdental brushes, interdental tips, pipe cleaners, toothpick holders, and wood interdental cleaners and the correct technique for application of each.
13. Determine the purposes for using disclosing solutions
14. Identify properties of an acceptable disclosing agent.
15. Discuss the method for application of a disclosing agent

G. Unit VII - Patient Positioning and Clinician Positioning

1. Define the key words and abbreviations relative to patient positioning and operator positioning
2. Discuss the proper way to greet a patient prior to seating the patient.
3. List the correct procedure for seating a patient for treatment.
4. Determine the proper etiquette for introduction of a patient to the dental personnel
5. Discuss the rationale for proper positioning of the operator and the patient.
6. Describe the alternative sitting position for the operator when treating a patient.
7. List the exceptions for placing a patient in the supine position.
8. Determine the adjustments made for positioning a small child and an adult that is 5' 3" and under.
9. Determine the correct light and chin position for treating the mandibular arch and the maxillary arch.
10. Discuss the correct clock position for the bracket table working area when working from the front of the patient and when working from behind the patient
11. List the correct clock positions and suggested zones for treating the mandibular arch anterior and posterior areas.
12. List the correct clock positions and suggested zones for treating the maxillary arch anterior and posterior areas.
13. Compare the proper greeting and dismissal of the adult patient to the child patient.

H. Unit VIII - Emergency Care in the Dental Office

1. Define the key words and abbreviations relative to emergencies in the dental office.
2. Identify factors which are increasing the risks for emergency care during dental care.
3. Identify the legal duties required of the dental hygienist regarding emergencies in the dental office.
4. Identify three ways to anticipate a possible emergency in the dental office.
5. Discuss the appropriate preparation and materials necessary to be organized for an emergency in the dental office.
6. List the steps for handling an emergency in the EPCC Dental Hygiene Clinic.
7. Identify the signs and symptoms of and the procedure for handling the medical/dental emergencies as outlined in the Emergency Reference Chart, in Wilkins

I. Unit IX - Patient Personal, Dental, and Medical Histories

1. Define the key words and abbreviations relative to client histories.
2. Discuss the purposes of the personal history, the medical history, and the dental history
3. List and define the two ways to obtain a history.
4. Discuss the advantages and the disadvantages of a questionnaire history and an interview history and determine which is most comprehensive.

5. List the items most commonly found in each of the patient's histories.
6. Identify the medical conditions which require a physician's written clearance and/or premedication and must be identified as a medical alert.
7. List the protocol or regimen for antibiotic premedication for oral procedures.
8. Identify the other medical conditions which influence the treatment of a patient and must be identified as a medical alert and then determine the necessary treatment modifications.
9. Discuss the purpose for identifying medications being taken and any drug allergies and the rationale for listing them on a medical alert.
10. Discuss the purpose of the Informed Consent Form.

J. Unit X - Patient Vital Signs

1. Define the key words and abbreviations relative to vital signs.
2. Discuss the rationale for taking vital signs.
3. List the normal range for temperature in the adult patient and the child patient.
4. Determine the common causes for temperature variations in a patient.
5. List the normal range for pulse in the adult patient and the child patient.
6. Determine the common causes for pulse change in a patient.
7. List the steps for taking and recording the pulse on a patient.
8. List the normal range for respiration in the adult patient and the child patient.
9. Determine the common causes for respiration variations in a patient.
10. List the steps for taking and recording the respiration for a patient.
11. List the normal range for blood pressure on the adult patient and the child patient.
12. Determine the common causes for blood pressure variations in a patient.
13. List the steps for taking and recording the blood pressure on a patient.
14. Determine the treatment modifications made for a patient with variations in each

K. Unit XI - Basic Instrumentation Procedures

1. Name and define the three parts of the instrument.
2. Name the two types of instrument grasps and discuss when each grasp is used
3. Describe the technique of each grasp, identifying the function each finger serves in the grasp.
4. Identify the correct wrist, arm, elbow, and shoulder positioning when using the basic instrument grasp.
5. Determine methods for dexterity development.
6. Discuss the measures the clinician should take to prevent cumulative trauma when developing the mechanics of instrumentation
7. List and define the four uses of the dental mirror.
8. Determine the purpose of the finger rest and delineate the difference between it and a fulcrum finger.
9. Define the intraoral finger rest and determine when it is used.
10. Define the extraoral finger rest and determine when it is used.
11. Describe the location of the ideal finger rest and define the built-up fulcrum.
12. Determine the rationale for using the wrist and arm action instead of the finger action.
13. Discuss the methods for preventing repetitive strain injuries (RSIs) by maintaining neutral wrist/grasp position.
14. Determine when the use of digital motion is appropriate.
15. Define and describe instrument adaptation, activation, and rolling motions.
16. Determine the effects of adequate vision and accessibility when activating and adapting the instrument in a patient's mouth.
17. List the three types of instrumentation strokes.
18. List and describe the three basic stroke directions.

L. Unit XII - The Extraoral and Intraoral Examination

1. Define the key terms and abbreviations appropriate to the extraoral and intraoral examination and the rationale for performing them.
2. List the items necessary to conduct a thorough extraoral and intraoral examination on a patient.
3. List and describe the four processes for manipulating the tissue in an extraoral and intraoral examination and determine when each process is used.
4. List the steps for a thorough extraoral examination and what anatomical areas should be observed during the examination.
5. List the steps for a thorough intraoral examination and what anatomical areas should be observed during the examination.
6. List and describe the early appearance of oral cancer which might be found during the extraoral and intraoral examination.
7. Discuss the EPCC Dental Hygiene Program policy and procedure for collecting and recording information on the extraoral and intraoral examination.

M. Unit XIII - The Gingival Examination

1. Define the key terms appropriate to the gingival examination. And determine the rationale for performing the exam.
2. List the clinical markers for recognition of gingival and periodontal diseases.
3. List and discuss the descriptive terms used when examining the gingiva and reviewing the structures of the gingiva and the supportive structures.
4. List and discuss the signs of healthy and diseased gingiva in the adult and child patient.
5. Determine the purpose of performing a tension test as part of the gingival examination.
6. Discuss the EPCC Dental Hygiene Program policy and procedures for collecting and recording data for the gingival examination.
7. Identify the APA Classification of Periodontal Disease used for patient classifications

N. Unit XIV - The Hard Tissue Examination

1. Define the key terms appropriate to the occlusion.
2. Determine the rationale for identifying occlusion problems on a patient.
3. List and discuss the three facial profiles.
4. List and describe the three classifications of the permanent dentition.
5. Describe the molar relationships for the occlusion of the primary teeth.
6. Define the key terms appropriate to the teeth.
7. Discuss the clinical appearance of and the clinical approach for enamel hypoplasia, attrition, erosion, abrasion, and fractures of the teeth.
8. Discuss the procedure for determining the mobility of a tooth and the degrees used when recording the movement.
9. Define the terms appropriate to dental stains and discolorations.
10. Determine the rationale for performing stains and discolorations examination of the teeth.
11. List and discuss the classifications of stains and how to recognize each.
12. List the seven types of extrinsic stains and discuss the clinical approach for each.
13. List endogenous intrinsic and exogenous intrinsic stains and discuss the clinical approach for each.

O. Unit XV - Dental Record and Charting

1. Define the key terms appropriate to dental records and charting and state the purpose of charting

2. List and describe the various tooth numbering systems for dental charting.
3. List the dental conditions that are recorded in blue and describe how each condition is charted.
4. List the dental conditions that are recorded in red and describe how each condition is charted.
5. Discuss the EPCC Dental Hygiene Program policy and procedures for collecting and recording information for charting and maintaining patient records.
6. Define the key terms appropriate to dental caries.
7. Discuss the clinical appearance of and the clinical approach for identifying dental caries.
8. List and discuss the six classifications of dental caries.
9. Identify the predisposing factors for the formation of a cavity.
10. Discuss the EPCC Dental Hygiene Program policy and procedures for providing radiographs for caries detection and for collecting and recording information on dental caries.

P. Unit XVI - Care of Dental Prostheses

1. Define the key terms appropriate to the care of dental prostheses.
2. Determine the rationale for Serving customers, Interpreting and e for providing a rigid program for the patient in caring for their dental prostheses.

Q. Unit XVII - Calculus

1. Define calculus
2. Identify how calculus is classified and its distribution in the oral cavity.
3. Describe the clinical characteristics of calculus.
4. Describe the structure of calculus, attachment and composition.
5. Discuss various methods that will assist in the prevention of calculus formation.

R. Unit XVIII - Instrument Classification and Design

1. Define the key terms appropriate to instrument classification and design.
2. List the three methods for identifying an instrument.
3. List and discuss the three functional shank lengths.
4. Describe the terminal shank and its purpose.
5. List and discuss the three types of flexibility in an instrument's shank.
6. Determine how to identify the correct working end on a double-ended instrument.
7. Describe the basic design characteristics of the working end of a curette.
8. Describe the basic design characteristics of the working end of a sickle.

S. Unit XIX - Explorers

1. Define the key terms appropriate to the explorer.
2. Describe the design of the handle, shank, and working end of an explorer.
3. List and discuss the two primary purposes and uses of the explorer.
4. List the various types of explorers and discuss their appropriate clinical applications.
5. Describe the technique for use of the Shepherd's Hook explorer and 11/12 explorer.
6. Describe the procedure for detecting calculus, contrasting visual detection of supragingival calculus and exploration of subgingival calculus.
7. Describe the various tactile sensations felt during exploration and calculus detection.
8. Discuss the EPCC Dental Hygiene Program procedure for collecting and recording information on calculus detection and on classifying patients.

T. Unit XX - Probes

1. Define the key terms appropriate to the probe and probing.
2. List the various types of probes and discuss the clinical application of each.
3. Describe the technique for measuring the sulcus or pocket depth.
4. Name the six areas of the tooth that are probed and discuss how each measurement is taken.
5. Determine the technique for correctly measuring the interproximal (col) depths of the tooth.
6. Discuss the purpose of walking the probe for taking objective and accurate readings.
7. Identify the factors which complicate probing and cause inaccurate readings.
8. Determine the probing modifications made when examining furcation involvement
9. Discuss the EPCC Dental Hygiene Program policy and procedures for collecting and recording periodontal readings

U. Unit XXI - Principles of Instrumentation and Calculus Removal

1. Define the key terms appropriate to instrumentation and calculus removal.
2. Discuss the mode of attachment for supragingival calculus and subgingival calculus and contrast the methods used to detect both for removal.
3. Discuss the purposes of scaling and removing dental calculus.
4. Discuss the rationale for tissue conditioning prior to scaling.
5. Discuss the rationale for scaling by sextant and by quadrant until complete calculus removal is accomplished.
6. Identify the zones into which the anterior and posterior teeth are divided for systematic scaling.
7. List and discuss the steps for correct adaptation, angulation, stabilization, and activation of the instrument for supragingival and subgingival calculus removal.
8. List the last step for both supragingival and subgingival calculus removal.
9. Discuss the pros and cons of partial or incomplete scaling.
10. Discuss the EPCC policy and procedure for the oral prophylaxis, tissue conditioning, scaling sequence, patient management, and post-operative care instruction and follow-up after scaling.

V. Unit XXII - Anterior Instruments: Sickle Scalers and Curettes

1. Define the key terms appropriate to anterior instruments.
2. Describe the instrument design of an anterior sickle scaler and an anterior gracey curette.
3. List and discuss the three visual guides for instrumentation with an anterior instrument.
4. Discuss the zoning process for scaling anterior teeth surfaces toward and surfaces away, both facially and lingually.
5. Discuss the anatomical contour and the general gingival topography of anterior teeth and determine the appropriate modifications for proper adaptation of an anterior instrument.

W. Unit XIII - Posterior Instruments

1. Define the key terms appropriate to gracey (area-specific) instruments.
2. List the six design features of a gracey (area-specific) instrument.
3. Contrast the standard gracey instrument to the rigid gracey instrument.
4. List and discuss the steps for selecting the correct working end of a gracey curette.
5. List and discuss the four steps for correct insertion of the gracey.,
6. Discuss the sequence of use of the gracey curette in the anterior treatment area and the posterior treatment area.
7. Define the key terms appropriate to the universal instrument.
8. List and discuss the design features of the universal instrument.
9. List the steps for selecting the correct working end of the universal instrument.

10. Discuss the sequence for use of the universal instrument in the anterior treatment area and the posterior treatment area.

X. Unit XIV - Plaque Removal and Polishing

1. Define the key terms appropriate to plaque and extrinsic stain removal and polishing.
2. Discuss the rationale for plaque and extrinsic stain removal.
3. Discuss the patient and environmental risks in polishing.
4. List and discuss the effects of polishing on the teeth, gingivae, and restorations.
5. List and discuss the indications and the contraindications for polishing.
6. Discuss the clinical applications of selective polishing.
7. Determine when the power driven polisher is indicated.
8. Describe the method of use for the power driven polisher.
9. Discuss the purpose of flossing at the completion of polishing.

III. THECB Learning Outcomes (WECM)

1. Explain the procedures and rationale for dental hygiene care.
2. Demonstrate basic dental hygiene instrumentation skills.
3. Define ethical principles related to dental hygiene care.

IV. Evaluations

A. Grading Scale

1. To successfully complete this course, the student must pass the lecture portion with a 75% or better grade.
2. Three (3) unit examinations will be given in this course. Exams are 80% of the lecture grade.
3. There will be a comprehensive final examination given during final examination week.
4. Unannounced pop quizzes may be given throughout the semester.
5. No retake examinations will be given.
6. For the weekly assigned readings, students will complete a structured inquiry form which will recall, summarize, question, comment on and connect ideas and concepts contained in the readings assigned for that class meeting. RSQC2 sheets must be typed and will only be accepted at the beginning of the class period for when it is due. This will account for 20% of the lecture grade.

Laboratory

1. To successfully complete this course, the student must pass the laboratory portion with a 75% or better grade.
2. Process/Product evaluations are to be completed by November 30, 2003. Students are reminded that it is their responsibility to monitor their progress on the process/product card. Valuable feedback and guided practice can only be provided if process/product evaluations occur at intervals throughout the semester. Students will use skill evaluations to prepare for the P/P evaluations. (80%)
3. Each student will be responsible for keeping a clinic log that will be assessed three times during the semester by the instructor of record. (15%)
4. The student will act as clinic assistant at assigned times throughout the semester. (5%)

B. Tardiness/Absent Policy

You will be expected to be present and on time for all lecture and laboratory sessions. If you present after the class begins, you will be considered tardy. The third incidence of tardiness will result IN THE LOSS OF A LETTER GRADE FROM THE FINAL GRADE. THIS WILL BE STRICTLY ENFORCED THROUGHOUT THE DENTAL HYGIENE PROGRAM.

C. Grading

A = 93 - 100
B = 83 - 92
C = 75 - 82
F = 74 and below

D. Grade Weights

Theory = 50%
Laboratory = 50%

E. Remediation

Assistance for individual remediation must be arranged through the instructor-of-record. Students may be assigned to a special help clinic on a weekly basis.

F. Unsafe Practice

Students who have exited due to documented incidents of unsafe practice, will not be considered for readmission regardless of the level of the course. See unsafe practice criteria attachment.

V. Disability Statement (American with/Disabilities Act [ADA])

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024).

VI. 6 Drop Rule

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.