Semester with Course Reference Number (CRN)
Fall Semester 2015 77274-Nguyen ; 77277-Guerrero

Instructor contact Information
Giang Nguyen, Lead Instructor (713) 718-7414

Course Instructors: Giang Nguyen; Hilda Guerrero

Office Location and Hours
Coleman College for Health Sciences
1900 Pressler, Houston, TX 77030

Giang Nguyen
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Hilda Guerrero
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Thursday 1:00 pm – 5:00 pm, Friday 8:00 am – 5:00 pm
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Course Location/Time
Coleman College: Clinic Room 562; Wed Lab: 1:00pm-2:00pm
Classroom Room 576; Thurs Lecture: 8:00am–10:00am

Course Semester Credit Hours (SCH) (lecture/lab) if applicable
Credit Hours 2.00

Total Course Contact 48.00
Course Length 16 Weeks
Type of Instruction Lecture/Lab

Course Description The dental hygienist in the dental health care system will emphasize on the basic concept of disease prevention and health promotion. Communication and behavior modification skills are presented to facilitate the role of the dental hygienist as an educator.
Course
Prerequisite(s)
PREREQUISITE(S):
• BIOL2401
• SOCI 1301
• CHEM 1305
• ENGL1301

CO-REQUISITE(S):
• BIOL2402
• DHYG1301
• DHYG1304
• DHYG1331

Required Textbook: Wilkins, Esther; Clinical Practice of the Dental Hygienist, Current Edition. Lippincott Williams & Wilkins, Philadelphia, PA

Reference Textbook: Daniel, Susan J. & Harfst, Sherry A.; Mosby’s Dental Hygiene; Current Edition
R.L. Wynn, T.F. Meiller, H.L. Crossley, Lexi-Comp, Inc.

Learning Outcomes
Discuss the role of the dental hygienist as a preventive dental team member; utilize the concepts of communication and behavior modification to develop a patient treatment plan; and explain the concepts of dental disease prevention and health promotion.

Scans:
C13 Negotiates to arrive at a decision; F1 Reading:
• Discuss the role of the dental hygienist as a preventive dental team member.
• Explain techniques to develop and implement a patient education plan for mild periodontal disease.

Academic
Discipline/CTE
Program Learning
Outcomes
1. The dental hygienist must create an informative tabletop presentation to appraise original research on a specific topic.
2. The dental hygienist must create a case study and evaluate clinical therapy treatment on a periodontal patient.
3. The dental hygienist must demonstrate the application of a therapeutic agent to clinical competency that is used in the field of dentistry.
4. Dental hygiene students must demonstrate an extra oral exam to identify the anatomy of the head and neck.
5. The dental hygienist must demonstrate psychomotor skills to deliver preventive services to patients.

Teaching Tools: PowerPoint, Videos, Handouts

General Course Objectives
The dental hygiene graduate will be able to:
1. Explain the concepts of dental disease prevention and health promotion. Introduction to Dental Hygiene: Understand the role, ethics behavior and expectations of the dental hygienist. (1.1; 1.2; 2.1)
2. Discuss the dental hygiene process of care and describe how it is incorporated into dental hygiene practice. (1.1; 2.1)
3. Identify the presence of factors predisposing to oral disease: plaque, calculus, and stain. (1.1; 2.1; 4.1; 4.2)
4. Discuss the process and factors involved with formation of dental caries.
5. Demonstrate knowledge of oral physiotherapy aids, dentifrices, mouth rinses and other oral self-care products in common use. (1.1; 2.1; 2.2)
6. Discuss oral cavity microorganisms that colonize and cause disease and the human defense factors that ward off infection. (1.1; 2.1; 2.2)
7. Discuss the types of fluorides used in professional and personal applications, their therapeutic benefits, risks, and application techniques. (1.1; 2.1; 2.2)
8. Explain the rationale for planning dental hygiene care that takes into account patient risk factors, social, cultural and economic issues and principles of patient motivation and education. (1.1; 1.2; 2.1; 2.2; 4.1; 5.1)

Specific Course Objectives:

1. Compose a personal definition of the competent Registered Dental Hygienist to encompass the values, ethics, requisites, perceptions of the past, present, and future of the career field. Develop a professional self-concept.
2. Define a dental hygienist.
3. Summarize the development of the dental hygiene profession.
4. Name six (6) roles that ADHA defines for the dental hygienist and give examples of each.
5. Discuss the role of the dental hygienist within the dental team and the role of other members.
7. List characteristics that define a profession.
8. Explain what a code of ethics is and what the purpose of one is.
9. List the fundamental principles, core values and standards of professional responsibility.
10. Describe the ethical responsibilities of a professional person.
11. Formulate their role as a student dental hygienist.

Visit ADHA, TDHA, and GHDHS websites. Visit the Texas State Board of Dental Examiners.

1. List the four (4) levels of ADHA.
2. State the mission of the ADHA.
3. List and identify the Dental Practice Act allowable duties for the Dental Hygienist.
4. Eaglesoft Software Training.

Biofilm and Other Soft Deposits

1. Discuss bacterial factors that allow oral microorganisms to colonize and cause disease in the oral cavity and the human defensive factors that ward off these infections.
2. Name and describe three (3) non-mineralized deposits.
3. List in order the three (3) main steps in biofilm formation.
4. Describe the composition of biofilm over time.
5. Describe the biofilm matrix and what purpose it serves.
6. Explain how bacteria can overcome the host defense capacity and why everyone doesn’t get caries and/or periodontal disease if they have biofilm.
7. State where biofilm formation begins.
8. Explain three mechanisms for bacterial adhesion and biofilm development.
9. Compare and contrast supra-and sub-gingival; biofilm characteristics.
10. Discuss the clinical significance of biofilm.
11. Name three (3) methods to assess the presence and quality of oral biofilm.
12. Every patient should be given information and taught the skills for self-care. List seven (7) treatment modalities for biofilm control and give examples of each.
13. Explain the process of demineralization. Also, explain this in layman’s terms to assist the patient’s understanding. State and explain the “formula” for dental caries.
14. Define the “Medical Model of Care” as it applies to dentistry.
15. Discuss the caries process and how it relates to different tooth structures. Identify the different classifications of decay.
16. Explain the process of early childhood caries in regards to etiology, prevention and risk factors.
17. List three (3) factors used to determine a patient’s recall interval.
18. Explain the role of diet, fluoride and calcium in the remineralization of tooth structure.
19. Discuss risk factors for dental caries and interventions for each.

Extrinsic and Intrinsic Staining
1. Describe the three ways a tooth can be discolored.
2. Identify and give examples of stains as categorized by location and source of discoloration.
3. List, contrast and compare the most common extrinsic and intrinsic stains with regard to name of stain, clinical appearance, distribution on tooth surfaces, composition, occurrence, and etiology.

Calculus and Bacterial Accumulations
1. Define dental calculus.
2. Summarize the importance of calculus as a mechanical and chemical irritant.
3. Discuss the impact of calculus on the health and form of the gingival.
4. Identify the organic and inorganic components of calculus.
5. Describe the steps in calculus formation.
7. Discuss the following factors with patients: plaque formation, calculus formation, pocket formation, plaque control and gingival healing.
8. Compare supra- and sub-marginal calculus.
9. Discuss mechanism of anti-calculus dentifrices.

Learning and Education for Patients
1. Recite definitions of learning and teaching.
2. List the principles of learning and apply them to aspects of dental care.
3. List the stages in the learning process (learning ladder).
4. Recall the steps in the education process for dental disease control:
   10.1 Assessing the patient’s current statues
   10.2 Determining the patient’s educational and health needs.
   10.3 Design an appropriate educational and preventive program.
   10.4 Implement the strategies.
5. Evaluate the effectiveness of the patient’s oral hygiene measures and assess thereasons for lack of progress and modify the educational and preventive program accordingly.
6. List and give examples of the characteristics of good instruction.

Periodontal Disease Development
1. Define periodontal disease.
2. Name four (4) by-products produced by bacteria that can contribute to periodontal disease.
3. List the eight (8) warning signs of periodontal disease.
4. Compare and contrast gingivitis and periodontitis.
5. Discuss the disease process of both.
6. Describe the clinical signs of periodontal disease.
7. Discuss the role of biofilm in the disease process.
8. List and discuss controls for periodontal disease.
9. Discuss the relationship of each of the following with periodontal disease: plaque control, tobacco use, diabetes, malocclusion, ill-fitting restorations/appliances, osteoporosis, xerostomia, diet, gingival recession and pockets.

Toothbrushes and toothbrushing
1. Discuss toothbrush design and technology.
2. Compare natural and nylon gristles.
3. State the factors influencing the selection of a toothbrush.
4. List the factors affecting bristle stiffness.
5. Discuss factors affecting abrasiveness of bristles.
6. List the purpose of toothbrushing.
7. Describe the daily care of a toothbrush.
8. Discuss improper toothbrushing signs.
9. List contraindications of toothbrushing and alternate cleaning techniques.
10. Describe and demonstrate toothbrushing techniques and list the advantages and limitations of each.
11. Explain the role of the ADA and FDA in product regulation.

Interdental CareIrrigation, Dentifrices, and Mouthrinses
1. List the basic dentifrice ingredients.
2. Explain the role of an abrasive in a dentifrice.
3. Outline the role of fluoride in a dentifrice.
4. Compare sodium and sodium monofluorophosphate fluoride.
5. Discuss the mechanisms and ingredients used for dentinal hypersensitivity and tartar control.
6. Discuss the current status of plaque control agents and whitening agents delivered in a dentifrice.
7. Select appropriate products for specific patient needs.
8. Describe the indications and contraindications for use of interdental cleaning devices: interdental brushes, end tuft brushes, rubber tip and tooth picks, oral irrigators, handicapped adaptations, tongue cleaners, and stimulators.
9. Select and/or modify appropriate oral physiotherapy methods and materials to meet individual patient needs:
   20.1 Toothbrushes/toothbrushing
   20.2 Chemotherapeutic agents
   20.3 Auxiliary cleaning aides
   20.4 Fluoride therapy
10. Discuss the appropriate materials to employ with each.
11. Describe the technique to use.
12. Explain the precautions to observe with each.
13. Discuss the role of the dental hygienist in recommending OPT aids.
14. List factors to consider when recommending dental floss.
15. State the effectiveness of interproximal plaque removal by the use of dental floss.
16. Demonstrate appropriate teaching strategies and techniques for teaching patient to use floss.
17. Identify signs of incorrect flossing such as clefting.
18. Recommend alternative devices to floss and state when they would be appropriate.

Fluoride Medical Terms
1. Describe the steps involved in and safety precautions for the application of professionally applied fluoride.
2. List the recommendations on the use of topical fluorides offered by the American Academy of Pediatric Dentistry and the 2006 Workshop on the Changing Patterns of fluoride Intake.
3. List the three types of fluorides (Stannous, APF, and Sodium), the concentration, and methods of administration that have been approved by the ADA and FDA for professional use.
4. Compare and contrast the difference between professional-use and home-use fluorides.
5. Verbalize the detrimental effects of fluoride.
6. List the symptoms of fluoride toxicity, antidotes for accidental fluoride poisoning, treatment for fluoride poisoning, and prevention of fluoride poisoning.
7. Name three (3) fluoride compounds used to control caries.
8. Identify which type of fluoride is less stable, must be mixed fresh daily and tends to stain the teeth.
9. Identify which fluoride is acid based and will etch porcelain.
10. Identify which type of fluoride is most effective in remineralizing early incipient lesions.
11. Identify which type of fluoride was tested clinically in a series of four (4) applications corresponding with eruption dates.
12. State whether plaque, calculus or stain removal is necessary prior to Fluoride treatment for enamel uptake to occur.
13. List characteristics of fluoride trays those are important.
14. Explain how reductions in professional concentrations of fluorides may be used.
15. State the optimal level of fluoride in drinking water.
16. Discuss the ADA guidelines on fluoride consumption by infants.
17. List the factors that should be considered when taking a fluoride history.
18. Determine the need for systemic fluoride supplements.

Indices Scoring Methods
1. List the purposes for using a disclosing agent.
2. Describe the properties of an acceptable disclosing agent.
3. Communicate information to the patient regarding the procedure.
4. List the purposes of a plaque index.
5. Perform the Patient Hygiene Performance^2 procedure.
6. Transfer clinical observations to numerical values.
7. Communicate the degree of oral cleanliness presented by the patient.
8. Motivate the patient to perform according to prescribed procedures.
9. Interpret the score to the patient with regard to degree of oral cleanliness achieved.

Patients with orthodontic appliances Patients with dental implants
1. Identify and key terms and concepts related to the care of patients with orthodontic appliances.
2. Provide oral hygiene instructions for a patient before, during, and following orthodontic treatment.
3. Identify and define key terms and concepts related to care of the patient with implants.
4. Discuss characteristics and factors that influence self-care or dental hygiene care of the rehabilitated mouth.
5. Discuss types, preparation and placement, and maintenance care for dental implants.
6. Discuss the components of a post-restorative evaluation of a dental implant.
7. Identify the factors that contribute to implant failure.

Care of dental prostheses
1. Identify and define key terms and concepts related to care of dental prostheses.
2. Identify the components and characteristics of a variety of dental prostheses.
3. Describe the cleaning and care of dental prostheses.
4. Identify procedures to care for the remaining natural teeth, implants, and underlying oral tissues.
5. Identify specific adjunctive cleaning aids for patients with dental implants.
6. Develop a disease control program for a patient with dental implants.
7. Discuss the criteria for implant success and failure.
8. Locate prosthetic cleaner and review instructions for use.

Course Calendar
August to Early December

Instructional Methods
Face to Face

Assignments
Must be completed on time (beginning of class period) and according to specified criteria. You are responsible for all reading assignments in course texts and handouts in addition to the content of the lecture and laboratory sessions themselves. Since information in each assignment will be used during the class sessions for discussions, it is essential that materials be carefully studied prior to class or laboratory.

Success
To successfully complete this course, the student will need to:
1. Complete assignments as indicated on the schedule.
2. Read weekly topic objective before class and studying for a test.
3. Ask the instructor for help as soon as you realize you are having difficulty.

HCC Grading Scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Points per Semester Hour</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>100 – 90</td>
<td>4 points per semester hour</td>
</tr>
<tr>
<td>B</td>
<td>89 – 80</td>
<td>3 points per semester hour</td>
</tr>
<tr>
<td>C</td>
<td>79 – 70</td>
<td>2 points per semester hour</td>
</tr>
<tr>
<td>D</td>
<td>69 – 60</td>
<td>1 point per semester hour</td>
</tr>
<tr>
<td>F</td>
<td>59 and below</td>
<td>0 points per semester hour</td>
</tr>
<tr>
<td>IP</td>
<td>In Progress</td>
<td>0 points per semester hour</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
<td>0 points per semester hour</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>0 points per semester hour</td>
</tr>
<tr>
<td>AUD</td>
<td>Audit</td>
<td>0 points per semester hour</td>
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</tbody>
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IP (In Progress) is given only in certain developmental courses. The student must re-enroll to receive credit. COM (Completed) is given in non-credit and continuing education courses. To compute grade point average (GPA), divide the total grade points by the total number of semester hours attempted. The grades “IP”, “COM”, and “I” do not affect GPA.

See “Health Science Program/Discipline Requirements” for grading scale.

Instructor Grading Criteria

GRADING: Grading for Requirements and Competencies will follow the scale below:
A 93 – 100
B 83 – 92
C 75 – 82
F 0 – 74*

*A final grade below a “C” (75%) will interrupt a student’s progress through the Program and will result in dismissal from the Program. If you are having trouble with this course, it is your responsibility to contact the instructor immediately and arrange for tutoring or other assistance.

Overall Requirements

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Major Exams</td>
<td>25%</td>
</tr>
<tr>
<td>Quiz Exams</td>
<td>30%</td>
</tr>
<tr>
<td>Class projects</td>
<td>15%</td>
</tr>
<tr>
<td>Lab participation</td>
<td>5%</td>
</tr>
<tr>
<td>Comprehensive Final</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Policy’s Requirements

LAB/CLINIC: Students are only allowed in lab or clinic with direct faculty supervision if practicing on each other/classmate. Students participating in clinical activities are to be in scrubs and using safety precautions at all times.

PROFESSIONAL POLICY: Students are expected to participate fully in all classroom and lab activities and to model professional behavior at all times. All students are considered mature enough to seek faculty assistance and to monitor their own progress in meeting course requirements.

MAKE-UP POLICY: The student will not be able to make up exams or quizzes without a doctor’s note and or at the instructor’s discretion. The student will receive a ‘0’ for that exam or quiz. The make-up exam must be taken the next day the student is in attendance and will be administered at a time scheduled with the instructor. Any student arriving after a test or quiz has been handed out will only be allowed the original time set by the instructor for completion. Any student arriving after a quiz or exam has been turned in by another student will not be allowed to take the test and will receive a ‘0’. Students are encouraged to practice skills during non-patient and class times. Skills may be practiced only on typodonts.

ATTENDANCE POLICY: Student are required to contact the program director or lead instructor of the course if you cannot be at school within the first hour of class start time. This can be done by phone, text, or email. Messages sent through a third party will not be accepted. Students are responsible for contacting instructors regarding missed work and/or assignments. Notification of an expected absence does not guarantee an excused absence. An excused absence requires documentation. For example, the student must provide an official signed doctor’s excuse for any illness or a formal document from a court for jury duty or a required court appearance. The documentation must be provided on the first day the student returns to class. If a student fails to contact the instructor or director, you will be given a written warning for the first offense. Additional offenses will result in a five (5) point deduction from the
final course grade. Any student who is absent from the class for more than 25% of a class/lab session will be counted absent for the day.

**TARDINESS:** You must be physically present in class and are considered tardy five (5) minutes by instructor cell phone’s clock after class or lab start time. Four (4) tardiness will equal to one (1) unexcused absence, resulting one (1) point deduction from the final course grade. Students who are absent from class/lab for a total of three (3) times will receive two (2) point deductions from the final course grade. The student must contact the lead instructor by e-mail or text if a tardy or absence is expected. Message relayed through classmates is not acceptable. Calling or emailing prior to class does not result in an “excused” absence or tardy, but rather assists the faculty in evaluating the student’s progress in professionalism. If you are not present, you are not learning the information or putting in the necessary time to develop your skills. You will receive an attendance notice (student communication form) every time you are tardy or absent from class.

**ELECTRONIC COMMUNICATION:** E-mail from the instructor is the official mode of communication. Students are required to check school email on a daily basis. Important information is disseminated through student emails. Students are held accountable for this information and any necessary responses.

**ELECTRONIC DEVICES:** phones, laptops, iPod, etc. should be silent at all times. They are not to be used during class/lab session unless given specific permission by instructor.

**HCC Policy Statement:**

**ADA STATEMENT:**
“Any student with a documented disability (e.g., physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the disability Services Office at the respective college at the beginning of each semester. Faculties are authorized to provide only the accommodations requested by the disability Support Services Office. The information in this publication will be made available in large print, taped, or computer-based format upon request.” The ADA Advisor for Coleman College is located on the 1st floor.

**ACADEMIC HONESTY STATEMENT:**
“Students are responsible for conducting themselves with honor and integrity in fulfilling course requirements. Penalties and/or disciplinary proceedings may be initiated by College System officials against a student accused of scholastic dishonesty.” Clinical competencies/requirements are considered a ‘test’ in the clinical setting. Therefore, no communication with another student during a competency/requirement is allowed as this is considered scholastic dishonesty. See the HCCS Dental Hygiene Student Handbook and the HCCS Student Handbook for more information.

**NOTICE:**
“Students who repeat a course three or more times face significant tuition/fee increases at HCC and other Texas public colleges and universities. Please ask your instructor/advisor about opportunities for tutoring or other assistance prior to considering course withdrawal or if you are not receiving passing grades.”

**DRUG-FREE SCHOOL**
HCC is fully dedicated to a drug-free environment for all students and employees at all college locations. The unlawful manufacture, distribution, possession, sale, offer to sell, purchase and/or use of controlled substances or alcohol on campuses, at teaching sites,
in vehicles, and on other property owned, leased, or under the control of HCC and at all
on-campus and off-campus, school sponsored activities is prohibited. Controlled
substances are those defined in Schedules I through V of Section 202 of the Texas
Health and Safety Codes 481.001 et seq. the Texas Controlled Substances Act.
Controlled substances include, but are not limited to, such substances as marijuana,
hashish, heroin, cocaine, LSD, PCP, methamphetamine, anabolic steroids,
human-growth hormones, and fentanyl. A student who uses a drug authorized by a
licensed physician through a prescription specifically for that student’s use shall not
be considered to have violated this rule. As a condition of enrollment, all students are
required to follow HCC policy and regulations concerning alcohol and other drugs.
College counselors are available to students for consultation on alcohol and other drug
issues. Counselors will assist students personally or act as a referral source when
necessary. All student-counselor relationships will be on a confidential basis to the
extent permitted by law.

**VIOLATIONS**
Students who violate the policy shall be subject to disciplinary proceedings according to
the Student Discipline and Conduct Code. Disciplinary action may include referral to
drug and alcohol counseling or rehabilitation programs or student assistance programs,
suspension, expulsion, and referral to appropriate law enforcement officials for
prosecution.

**EGLS3 - EVALUATION FOR GREATER LEARNING**
Student Survey System

At Houston Community College, professors believe that thoughtful student feedback is
necessary to improve teaching and learning. During a designated time, you will be
asked to answer a short online survey or research-based questions related to
instruction. The anonymous results of the survey will be made available to your
professors and division chairs for continual improvement of instruction. Look for the
EGLS3 as part of the Houston Community College Student System online near the end
of the term.

Access Student Services Policies on their Web site: [http://hccci.edu/student-rights](http://hccci.edu/student-rights)
Syllabus Agreement

I have read this syllabus. I understand its implications and will abide by it. I understand that if I fail to adhere to these requirements I will be advised by my instructor of disciplinary actions that will be taken against me. I understand that the course coordinator has the right to make alterations to the class and assignments as deemed necessary.

Signature of Student:_____________________________________________________

Print Name:_____________________________________________________________

Date:______________________________________________________________

Instructor’s Signature:____________________________________________________

Date:______________________________________________________________