



INSTRUCTIONAL PACKAGE

DHG 175

Clinical Dental Hygiene II

201830
Summer/2019

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: 201830

COURSE PREFIX: DHG 175

COURSE TITLE: Clinical Dental Hygiene II

CONTACT HOURS: (Lab) 13.5

CREDIT HOURS: 5

CONTACT HOURS: (Lecture) 2

RATIONALE FOR THE COURSE:

DHG 175 focuses on continued enhancement of clinical skills in the dental hygiene setting, building on the foundation of patient care introduced in DHG 165. Emphasis is placed on all patient treatment skills related to assessment, diagnosis, treatment planning/implementation, evaluation and documentation.

The lecture portion of DHG 175 provides an overview of special needs patients and will examine dental hygiene interventions and patient management strategies to meet individualized needs of those populations. Local anesthesia coursework will be introduced in lecture.

COURSE DESCRIPTION:

This course provides for the continued development of the skills necessary to perform dental hygiene care. Emphasis is placed on total patient care and treatment planning

PREREQUISITES/CO-REQUISITES:

PRE-REQUISITES:

2-9-5	DHG 165	Clinical Dental Hygiene I
2-3-3	DHG 121	Dental Radiography
1-3-2	DHG 151	Periodontology
2-0-2	DHG 153	Nutrition

CO-REQUISITES:

1-3-2	DHG 239	Dental Assisting for Dental Hygienists
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REQUIRED MATERIALS:

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks.

[BOOKSTORE.](#)

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials.
WaveNet and D2L email access.

STUDENT IDENTIFICATION VERIFICATION

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification. Please refer to your Instructor Information Sheet for information regarding this requirement.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate. You are not permitted to have your cell phone in the clinic. ***Please refer to your Dental Sciences Policy and Procedures manual for more information regarding cellphone policy.***

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Learning Outcomes:

Upon completion of DHG 175 the student will be able to:

1. Assessment
 - Execute a complete evaluation of medical history.
 - Accurately take vital signs.
 - Perform a thorough intraoral/extraoral examination.
 - Chart dental restorations and periodontal findings.
 - Calculate plaque, calculus and stain indices.
 - Assess risk factors: caries, oral cancer, tobacco use.
2. Dental Hygiene Diagnosis
 - Formulate a patient care plan utilizing findings from the assessment.
3. Planning
 - Establish an evidenced-based sequence of care based on the dental hygiene diagnosis; identified oral conditions and potential risk factors.
 - Obtain medical consultation when appropriate.
 - Complete referrals to other health care professionals as needed and properly complete outgoing referral forms as warranted.
 - Obtain the patient's informed consent based on a thorough case presentation.

4. Implementation

- Provide a high standard of care to all patients in a caring manner.
- Perform dental hygiene treatment to eliminate and/or control local etiologic factors to prevent and control caries, periodontal disease and other oral conditions.
- Control pain and anxiety during treatment through the use of accepted clinical and behavior techniques.

5. Evaluation

- Assess the outcomes of dental hygiene treatment utilizing various indices, instruments, etc.
- Evaluate the patient's satisfaction with the care that has been received and the health status that has been achieved.
- Establish appropriate treatment or referrals based on evaluation data
- Develop and maintain an appropriate maintenance program for the patient.

1. Explain and incorporate dental hygiene management strategies to meet individualized needs of special needs patients.
2. Demonstrate proficiency in the administration of local anesthesia.

In addition, the student should:

1. Adhere to the *American Dental Hygienists' Professional Code of Ethics*.
2. Follow state and federal rules and regulations governing the practice of dental hygiene.
3. Utilize critical analysis and problem solving skills in the provision of dental hygiene care.
4. Respect the goals, values, beliefs, and preferences of the patient throughout treatment.
5. Utilize infection control protocols for prevention of disease transmission through demonstration of proper sterilization and disinfection methods, barrier techniques and maintenance of asepsis.
6. Demonstrate professionalism in collaborating with peers, faculty, and patients.

Assessments/Competencies:

Upon completion of DHG 175, the student will perform to *clinical competency* the following procedures:

- Care of removable appliances
- Calculus detection
- Create a patient care plan (child, adolescent, adult, geriatric)
- Use dental indices to determine calculus, plaque, and stain
- Chart dental restorations and periodontal findings
- Perform a thorough review of a patient's health history
- Complete an intraoral and extraoral examination
- Provide individualized oral health education
- Place pit and fissure dental sealants
- Perform scaling and root planing

- Apply fluoride varnish treatments
- Demonstrate proficiency on use of ultrasonic

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates***

Module 1: The Patient with Cancer and the Patient with Respiratory Disease

Materials Covered: Wilkins Ch. 56 & 66

Assessments: In-class Discussion, Test, Competencies

Objectives:

- 1) Identify healthcare professionals involved in the multidisciplinary oncology team.
- 2) List risk factors associated with an increased risk for developing cancer.
- 3) Explain indications for chemotherapy and radiation therapy.
- 4) Describe common oral complications secondary to cancer treatment.
- 5) Explain oral care protocol recommended before, during, and after cancer therapy.
- 6) Define key term related to respiratory diseases.
- 7) Identify dental hygiene care for patients with compromised respiratory function.

Module 2: The Patient with Physical Impairment, the Patient with Seizure Disorder & the Diabetic Patient

Materials Covered: Wilkins Ch. 59, 63 & 69

Assessments: In-class Discussion, Test, Competencies

Objectives:

- 1) Identify key terms related to physical impairment.
- 2) Describe oral factors related to physical impairments and modifications for dental hygiene care based on assessment of needs specific to a patient’s impairment.
- 3) Explain the etiology of seizure disorders.
- 4) Discuss the clinical manifestations of seizure disorders.
- 5) Develop a dental hygiene care plan, including patient education prevention strategies, for working with patients who have seizure disorders.
- 6) Describe the types of diabetes mellitus and major characteristics of each.
- 7) Explain current knowledge about the oral health-diabetes connection.
- 8) Identify key messages the dental hygienist needs to convey to a diabetic patient.

Module 3: The Patient with an Endocrine Disorder & the Patient with a Blood Disorder

Materials Covered: Wilkins, Ch. 52 & 68

Assessments: In-class Discussion, Test, Competencies

Objectives:

- 1) Identify the major endocrine glands and describe the functions of each.
- 2) Explain signs, symptoms, and oral manifestations of each endocrine gland disorder.

- 3) Describe the major types of blood disorders.
- 4) List the oral signs and symptoms of the major types of blood disorders.
- 5) Provide examples of dental hygiene treatment modifications necessary for the patient with a blood disorder.
- 6) Discuss the importance of medical history and medication review with a patient to determine potential impact on treatment considerations.

Module 4: The Mental Health Patient and the Substance Abuse Patient

Materials Covered: Wilkins, Ch. 64 & 65

Assessments: Assessments: In-class Discussion, Test, Competencies

Objectives:

- 1) Describe the various types of mental health disorders and associated major symptoms.
- 2) Summarize the side effects of treatment for mental health disorders that may have oral health implications.
- 3) Explain dental hygiene treatment considerations for each major category of mental health disorder.
- 4) Define key terms related to the metabolism, effects, and use patterns of alcohol.
- 5) Identify physical health hazards, medical effects, and oral manifestations associated with alcohol and other drug abuse.
- 6) List the names of the most commonly abused drugs and describe their intoxication effects and methods of use.
- 7) Describe methods for clinical assessment of potential substance abuse.

Module 5: The Neurodevelopmental Patient, Older Patient & the Cardiovascular Patient

Materials Covered: Wilkins, Ch. 61, 53 & 67

Assessments: In-class Discussion, Test, Competencies

Objectives:

- 1) Provide examples of the characteristics, oral findings, and health problems associated with patients who have neurodevelopmental disorders.
- 2) Explain adaptations necessary for providing dental hygiene care for a patient with a neurodevelopmental disorder.
- 3) Describe physiological and cognitive changes associated with aging.
- 4) Identify common oral changes associated with aging.
- 5) Demonstrate best practices for communicating with the older adult patient.
- 6) Discuss the etiology, symptoms and risk factors associated with cardiovascular conditions.
- 7) Explain the impact of cardiovascular diseases on the oral cavity and their relationship to oral health.
- 8) Describe dental hygiene treatment modifications for the patient with cardiovascular disease.

Module 6:

Materials Covered: Local Anesthesia for the Dental Hygienist Ch. 2 Neurophysiology, Ch. 3 Pharmacology of Local Anesthetic Agents, Ch. 4 Pharmacology of Vasoconstrictors

Assessments: Assessments: In-class Discussion, Test, Competencies

Objectives:

- 1) Name the functional unit of a nerve system and explain its main function.
- 2) Discuss the structure and classification of neurons and differentiate between afferent and efferent nerves.
- 3) Describe the basic structures and functions of a sensory neuron.
- 4) Discuss neurophysiology and action potential
- 5) Discuss the mode of action of local anesthesia agents on nerves.
- 6) Define and discuss the mechanism of action of local anesthetics.
- 7) Discuss the difference between esters and amides.
- 8) Discuss the properties and ionization factors of local anesthetics.
- 9) Describe pH and the dissociation constant (pKa) as well as their effects on the onset of action of local anesthetics.
- 10) Discuss the pharmacokinetics of local anesthetics.

Module 7:

Materials Covered: Local Anesthesia for the Dental Hygienist, , Ch. 5 Local Anesthetic Agents, & Ch. 6 Topical Agents Ch. 7 Pre-anesthetic Assessment, Ch. 8 Determining Drug Doses

Assessments: Assessments: In-class Discussion, Test, Competencies

Objectives:

- 1) Discuss the selection considerations when choosing a local anesthetic.
- 2) Differentiate between a relative and an absolute contraindication
- 3) Discuss the properties, duration, maximum recommended for local and topical anesthetics.
- 4) Identify and describe the common topical anesthetic agents used in dentistry.
- 5) Discuss the importance of obtaining a patient's medical history, dental history, and dialogue history.
- 6) Describe vasoconstrictor and systemic disease interactions and summarize vasoconstrictor contraindications.
- 7) Describe the drug-to-drug interactions that may occur between the vasoconstrictor and other drugs.
- 8) Name the steps to calculate MRDs for local anesthetics and perform calculations as needed.
- 9) Discuss the factors involved in calculating MRDs for vasoconstrictors for medically compromised and elderly patients and perform calculations as needed.
- 10) Discuss vasoconstrictor dilutions and the MRD for vasoconstrictor drugs.
- 11) Determine the limiting drug when a local anesthetic agent and a vasoconstrictor are combined in an anesthetic cartridge.

Module 8:

Materials Covered: Local Anesthesia for the Dental Hygienist, , Ch. 9 Armamentarium/Syringe Preparation, Ch. 10 Anatomic considerations for Local Anesthesia Administration, & Ch. 11 Basic Injection Techniques Ch. 12 Maxillary Anesthesia, Ch. 13 Mandibular Anesthesia, Ch. 14 Local Anesthesia for the Child and Adolescent, & Ch. 15 Local Anesthetic Complications

Assessments: Assessments: In-class Discussion, Test, Competencies

Objectives:

- 1) Name and discuss the three main components to the armamentarium of anesthetic equipment and supplies.
- 2) Name and discuss the component of the needle, as well as recognize manufacturer color codes for needle gauge.
- 3) List and discuss the steps necessary to prepare, as well as unload, the breech-loading aspirating syringes.
- 4) Indicate and describe the various landmarks of the maxillae, palatine bones, and mandible that are relevant to the administration of local anesthesia. Identify and trace the branches of the trigeminal nerve that are relevant to the administration of local anesthesia.
- 5) Describe the four anesthetic administration techniques.
- 6) Discuss the importance of understanding the anatomy of the maxillary and mandibular nerves and its branches when it comes to the utilization of local anesthesia within the maxillary and mandibular arches.

Module 9:

Materials Covered: Local Anesthesia for the Dental Hygienist, Ch. 12 Maxillary Anesthesia, Ch. 13 Mandibular Anesthesia, Ch. 14 Local Anesthesia for the Child and Adolescent, Ch. 15 Local Anesthetic Complications & Ch. 16 Legal Considerations and Risk Management

Assessments: Assessments: In-class Discussion, Test, Competencies

Objectives:

- 1) Identify the correct tissue inserted into by the local anesthetic needle for each maxillary facial injection.
- 2) Discuss the indications of clinically effective injections as well as possible complications.
- 3) List and describe the three supplemental injections that can be administered within the mandibular arch as well as the maxillary arch.
- 4) Discuss why systemic toxicity and MRD is more common in children than adults.
- 5) Describe the prevention and management of postoperative soft tissue injuries in children.
- 6) Describe the local anesthesia delivery techniques for children, including patient preparation and administration protocol.
- 7) Describe the type of information that should always be included in patient documentation
- 8) Describe the procedures to reduce the risk of accidental needle exposure
- 9) Describe post exposure management

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS*

Students' performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION (Clinic) 70% of your grade:

Completion of 10 Clinical Patients	80%
Radiographic Interpretation	20%
CA/RA Duties	10 %
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	100%

EVALUATION (Lecture) 30% of your grade:

Test 1	25%
Test 2	20%
Quiz 1 (anesthesia)	10%
Quiz 2 (anesthesia)	10%
Quiz 3 (anesthesia)	10%
Final Exam	25%
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	100%

****Students, for the specific number and type of evaluations, please refer to the Instructor's Course Information Sheet.***

GRADING SYSTEM:

A=90-100

B=80-89

C=77-79

D=70-76

F=69 and below

Student must complete the course with a grade of 77% or higher in lecture and clinic to pass this class.

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop ([ACADEMIC CALENDAR](#)). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll.

The Dental Sciences Program requires 90% attendance; a student may be withdrawn after they have been absent in excess of 10% of the total contact hours for the course.

Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.

Please refer to your Dental Sciences Policy and Procedures manual for more information regarding attendance.

Part V: Student Resources



The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

- 1. Academic coaches** for most subject areas, **Writing Center Support**, and **college success skills.**
- 2. On-line student success and academic support resources.**

Visit the SSTC website: [Student Success & Tutoring Center](#) and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455 or go to the [Online Resource Center](#) to access on-demand resources any time.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

1. **Getting around HGTC:** General information and guidance for enrollment!
2. Use the [Online Resource Center \(ORC\)](#) for COMPASS support, technology education, and online tools.
3. **Drop-in technology support or scheduled training** in the Center or in class.
4. **In-person workshops, online tutorials and more services** are available.

Visit the WNC website: [Wavenet Central](#). Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Disability Services:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Beth Havens, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

Inquiries regarding the non-discrimination policies: Students and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs, Dr. Melissa Batten, VP Student Affairs, Title IX Coordinator, Building 1100, Room 107A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5228, Melissa.Batten@hgtc.edu. Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources, Jacquelyne Snyder, VP Human Resources, Section 504, Title II, and Title IX Coordinator, Building 200, Room 212A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5212, Jacquelyne.Snyder@hgtc.edu.

Title IX Requirements

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college’s Chief Student Services Officer, campus law enforcement, or with the college’s Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non-discrimination policies:	
Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.	Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.
Dr. Melissa Batten, VP Student Affairs <i>Title IX Coordinator</i> Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 Melissa.Batten@hgtc.edu	Jacquelyne Snyder, VP Human Resources <i>Section 504, Title II, and Title IX Coordinator</i> Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu