

INSTRUCTIONAL PACKAGE

AHS 113 Head and Neck Anatomy

Effective Term Fall 2022/Spring 2023/Summer 2023

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Part I: Course Information

Effective Term: Fall 2022

COURSE PREFIX: AHS113 COURSE TITLE: Head and Neck Anatomy

CONTACT HOURS: 1 CREDIT HOURS: 1

RATIONALE FOR THE COURSE:

At the completion of this course, the student will be able to:

- 1. Identify and name the bones of the human skull.
- 2. Identify major landmarks of the skull.
- 3. Identify the muscles of mastication and describe their origin, insertion, and function.
- 4. Identify the components of the temporomandibular joint and their function.
- 5. Identify and name the muscles of the tongue.
- 6. Identify the muscles of facial expression.
- 7. Identify the cranial nerves.
- 8. Identify the arteries and veins that supply the head and neck.
- 9. Describe the location and ducts of the major salivary glands.

COURSE DESCRIPTION:

This course provides a detailed study of the structure of the head and neck with special emphasis on structure as it pertains to the study of dental science.

PREREQUISITES/CO-REQUISITES:

Admittance into the Dental Hygiene Program

CO-REQUISITES:

DHG 125 Tooth Morphology & Histology DHG 151 Dental Hygiene Principles

REQUIRED MATERIALS:

Please visit the <u>BOOKSTORE</u> online site for most current textbook information. Use the direct link below to find textbooks.

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

TECHNICAL REQUIREMENTS:

2022-2023

Access to Desire2Learn (D2L), HGTC's student portal for course materials. myHGTC and college 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. *Refer to the HGTC Dental Sciences Program Manual for additional policies on classroom etiquette.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit <u>Online</u> <u>Netiquette.</u>

Part II: Student Learning Outcomes

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

<u>Module 1</u> <u>Materials Covered:</u> Brand/Isselhard, Chapt. 26 Osteology of the Skull <u>Assessments:</u> Quizzes, Tests, Final Exam

<u>Objectives:</u>

- 1. To name the bones of the cranium
- 2. To identify the various bones and suture of the skull
- 3. To name the openings, foramina, canals of the skull
- 4. To describe the boundaries of the three cranial fossae
- 5. To describe the pterygoid processes of the sphenoid bone
- 6. To describe the various parts and landmarks of the maxilla and mandible
- 7. To describe where growth takes place in the maxillae and mandible to allow for increase in arch length.

Module 2

<u>Materials Covered:</u> Brand/Isselhard, Ch. 27 Nose, Nasal Cavity, and Paranasal Sinuses <u>Assessments:</u> Quizzes, Tests, Final Exam

Objectives:

- 1. To define the terms nose, nasal cavity, and paranasal sinuses
- 2. To understand the anatomy of the nose, nasal cavity, and paranasal sinuses
- 3. To describe the function of the nose, nasal cavity, and paranasal sinuses
- 4. To discuss the anatomic relationship between the maxillary sinus and maxillary teeth

5. To describe the relationship between maxillary teeth and the maxillary sinus in infection of either one

<u>Module 3</u>

<u>Materials Covered:</u> Brand/Isselhard, Ch. 28, Muscles of Mastication, Hyoid Muscles, and Sternocleidomastoid and Trapezius Muscles

Assessments: Quizzes, Tests, Final Exam

Objectives:

- 1. To describe the origin, insertion, action, and nerve and blood supply of the muscles of mastication
- 2. To categorize the muscles according to their roles in elevation, depression, protrusion, retrusion, and lateral excursion of the mandible
- 3. To describe the functions of the sternocleidomastoid and trapezius muscles and their roles in referred pain to various area, including the temporomandibular joint
- 4. To name the suprahyoid and infrahyoid muscles and their roles in mandibular movement, swallowing, and phonation.

Module 4

Materials Covered: Brand/Isselhard, Ch. 29 Temporomandibular Joint

Assessments: Quizzes, Tests, Final Exam

Objectives:

- 1. To diagram and label a sagittal section of the temporomandibular joint(TMJ)
- 2. To define the role of a synovial cavity
- 3. To describe the two movements of the TMJ as the mouth opens and know where these movements take place
- 4. To describe the role of the superior posterior elastic lamina, the inferior posterior collagenous lamina, and the superior and inferior heads of the lateral pterygoid muscle as the jaw goes through it various functional movements
- 5. To define disc derangement, subluxation, bruxism, and TMJ sounds
- 6. To discuss probable cause of TMJ pain

<u>Module 5</u>

Materials Covered: Brand/Isselhard, Ch. 30 Muscles of Facial Expression

Assessments: Quizzes, Tests, Final Exam

Objectives:

- 1. To name the various groupings or locations of the muscles of facial expression and their nerve innervations
- 2. To describe the muscles of facial expression and their origins, insertions, and actions
- 3. To name all the muscles surrounding the mouth and their origins, insertion, and actions
- 4. To discuss the role of the buccinators muscle in mastication

<u>Module 6</u>

Materials Covered: Brand/Isselhard, Ch. 31 Soft Palate and Pharynx

Assessments: Quizzes, Tests, Final Exam

Objectives:

- 1. To describe the origins, insertions, actions and nerve supplies of the muscles of the soft palate and pharynx
- 2. To describe the interrelationship of all of these muscles in chewing, swallowing, and speech

Module 7

<u>Materials Covered:</u> Brand/Isselhard, Ch. 32 Arterial Supply and Venous Drainage Assessments: Quizzes, Tests, Final Exam

Objectives:

- 1. To trace blood from the time it returns from the vena cava to their heart, out, and back until it returns again from their entire body
- 2. To trace blood supply from the heart to all areas of the oral cavity, including teeth
- 3. To trace venous drainage from teeth and oral cavity back to the heart
- 4. To define hematoma
- 5. To discuss the possible problems associated with a posterior superior alveolar injection

Module 8

<u>Materials Covered:</u> Brand/Isselhard, Ch. 33 Salivary Glands <u>Assessments:</u> Quizzes, Tests, Final Exam

Objectives:

- 1. To describe the differences between the major and minor salivary glands
- 2. To name and locate each of the major and minor glands
- 3. To classify each of the glands according to its type of secretion
- 4. To describe the function of saliva
- 5. To describe the development of the ducts and the ductless glands

Module 9

Materials Covered: Brand/Isselhard, Ch. 34 Nervous System

Assessments: Quizzes, Tests, Final Exam

Objectives:

- 1. To name the basic components of the nervous system
- 2. To describe the general makeup of a spinal nerve
- 3. To describe how a sensory impulse causes a motor response
- 4. To name the 12 cranial nerves and their general function
- 5. To describe the components and general function of the autonomic nervous system
- 6. To name the specific branch of the trigeminal nerve and which areas of the face, teeth, and oral cavity each branch supplies
- 7. To describe the nerves and areas involved in general and special sensation of the tongue
- 8. To discuss the nerves and pathways involved in parasympathetic innervation to major salivary glands

Module 10

<u>Materials Covered:</u> Brand/Isselhard, Ch. 35 Lymphatics and Spread of Dental Infection <u>Assessments:</u> Quizzes, Tests, Final Exam

<u>Objectives:</u>

- 1. To briefly discuss the function of the lymphatic system
- 2. To diagram and label the major groups of lymph nodes that drain teeth and their oral cavity
- 3. To define the terms primary, secondary, and tertiary nodes of the involvement as they relate to lymph drainage
- 4. To name the primary lymph drainage of all teeth
- 5. To discuss briefly the concept to facial space infection
- 6. To explain how a fascial space infection may spread from the oral cavity to the thorax
- 7. To define Ludwig's angina

<u> Module 11</u>

<u>Materials Covered:</u> Brand/Isselhard, Ch. 36 Anatomic Consideration of Local Anesthesia <u>Assessments:</u> Quizzes, Tests, Final Exam

Objectives:

- 1. To understand the anatomy of the maxillary nerve as it relates to administration of local anesthesia
- 2. To understand the anatomy associated with mandibular blocks
- 3. To understand the different areas anesthetized by the maxillary and mandibular nerve blocks
- 4. To understand the major concerns associated with different local anesthetic nerve blocks
- 5. To understand the anatomic considerations during administration of local anesthesia
- 6. To understand the anatomy involved in infiltration, supraperiosteal, and nerve block injections

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

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*

Tests	80%
<u>Final Exam</u>	20%
	100%

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

GRADING SYSTEM:

Please note the College adheres to a 10 point grading scale A = 100 - 90, B = 89 - 80, C = 79 - 70, D = 69 - 60, F = 59 and below. You must have your Dean's approval if changes in the scale are made.

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 <u>academic calendar</u> for deadlines for add/drop. 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. Instructors define absentee limits for their class at the beginning of each term; please refer to the Instructor Course Information Sheet.

*Refer to the HGTC Dental Sciences Program Manual for additional attendance policies.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

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

- 1. Academic tutors for most subject areas, Writing Center support, and college success skills.
- 2. Online **tutoring** and academic support resources.
- 3. Professional and interpersonal communication **coaching** in the EPIC Labs.

Visit the <u>Student Success & Tutoring Center</u> website for more information. To schedule tutoring, contact the SSTC at sstc@hgtc.edu or self-schedule in the Penji iOS/Android app or at <u>www.penjiapp.com</u>. Email <u>sstc@hgtc.edu</u> or call SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455, or go to the <u>Online Resource Center</u> to access on-demand resources.



STUDENT INFORMATION CENTER: TECH Central

TECH Central offers to all students the following <u>free</u> resources:

- 1. **Getting around HGTC**: General information and guidance for enrollment, financial aid, registration, and payment plan support!
- 2. Use the <u>Online Resource Center (ORC)</u> including Office 365 support, password resets, and username information.
- 3. In-person workshops, online tutorials and more services are available in Desire2Learn, Student Portal, Degree Works, and Office 365.

4. Chat with our staff on TECH Talk, our live chat service. TECH Talk can be accessed on the student portal and on TECH Central's website, or by texting questions to (843) 375-8552.

Visit the <u>Tech Central</u> website for more information. Live Chat and Center locations are posted on the website. Or please call (843) 349 – TECH (8324), Option #1.

The Instructor Information Sheet will have more details on test requirements for your course.

DISABILITY SERVICES:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to HGTC's <u>Accessibility and Disability Service webpage</u>. The Accessibility and Disability staff 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.

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/TITLE IX 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.

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 <u>Melissa.Batten@hgtc.edu</u>

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

EEO and Title IX Coordinator Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu