

HGTC

Horry-Georgetown
Technical College

INSTRUCTIONAL PACKAGE

DAT 118

Dental Morphology

Effective Term

Fall 2026/Spring 2027/Summer 2027

Part I: Course Information

Effective Term: Fall 2027

COURSE PREFIX: DAT118

COURSE TITLE: Dental Morphology

CONTACT HOURS: 4

CREDIT HOURS: 2

RATIONALE FOR THE COURSE:

This course covers the embryogenesis and histology of human head and neck structures with emphasis placed upon differences between normal, variant, and/or defects of oral structures during the development process. Formation, eruption patterns, and morphology of both primary and permanent dentitions are studied, in addition to the three most recognized methods of dental charting.

COURSE DESCRIPTION:

This course emphasizes the development, eruption, and individual characteristics of each tooth and surrounding structures.

PREREQUISITES/CO-REQUISITES:

PREREQUISITES:

Admittance into the Expanded Duty Dental Assisting Program

CO-REQUISITES:

DAT 127 Dental Radiography

DAT 113 Dental Materials

DAT 154 Clinical Procedures

DAT 174 Office Rotations

REQUIRED MATERIALS:

Please visit the [BOOKSTORE](#) online site for most current textbook information.

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

ADDITIONAL REQUIREMENTS:

Students are responsible for printing selected guided notes, charting exercises, laboratory worksheets, and supplemental course materials as assigned. Colored pencils and/or highlighters may be required for charting and tooth morphology activities.

Supplemental educational resources, videos, continuing education modules, and clinical correlation assignments may be incorporated throughout the semester to support course objectives and CODA competencies.

TECHNICAL REQUIREMENTS:

- Access to Desire2Learn (D2L), HGTC's learning management system (LMS) used for course materials.
- Access to myHGTC portal for student self-services.
- College email access – this is the college's primary official form of communication.

ATTENDANCE VERIFICATION:

The Add/Drop Period is the first 7 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format classes. Please refer to the [academic calendar](#) for deadlines for add/drop. You must attend at least one meeting of all 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

IDENTIFICATION VERIFICATION:

Students enrolled in online courses will be required to complete identity verification. Please refer to your Instructor's Course Information Sheet for information regarding this requirement.

STUDENT COURSE EVALUATIONS:

Each semester, students are provided with an opportunity to participate in course evaluation surveys. These evaluations offer crucial feedback to instructors and the College, leading to enhancement of educational quality. By completing these surveys, you play a key role in the ongoing improvement of teaching methods and course content, ensuring future students enjoy a better learning experience. Students are encouraged to complete these surveys as your active participation in this process reflects your dedication to your education and drives positive change.

CLASSROOM ETIQUETTE AND STUDENT RIGHTS AND RESPONSIBILITIES:

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 an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

To ensure a positive College experience, guidelines exist in numerous areas of campus life. The Student Code for The South Carolina Technical College System "The Student Code" (3-2-106.1) applies to all HGTC students. The Student Code sets forth rights and responsibilities of the individual student, identifies behaviors that are not consistent with the values of college communities, and describes the procedures that will be followed to adjudicate cases of alleged misconduct. Students are expected to conduct themselves in a civil manner, that is respectful of the rights of others, and that is compatible with the college's educational mission. Students are expected to comply with all of the college's duly established rules and regulations regarding student behavior while on campus; while participating in off-campus college sponsored activities; and while participating in off-campus clinical, field, internship, or in-service experiences. Students are expected to comply with all course requirements as specified by instructors in course syllabi and to meet the standards of acceptable classroom behavior set by instructors. For more information, login to your myHGTC account under "Student Rights and Responsibilities" card then select "Student Code of Conduct" or the "Student Catalog and Handbook."

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 [Online Netiquette](#).

Part II: Student Learning Outcomes**COURSE LEARNING OUTCOMES and ASSESSMENTS*:**

Students who successfully complete this course will be able to:

- Identify and describe normal head, neck, oral cavity, and tooth anatomy as it relates to dental assisting practice.
- Demonstrate understanding of dental terminology, tooth nomenclature, anatomical directional terminology, and tooth surface identification used in dentistry.
- Correctly identify permanent and primary teeth using the Universal Numbering System and primary dentition lettering system.
- Identify dental arches, quadrants, tooth surfaces, and anatomical landmarks of the oral cavity.
- Describe the eruption sequence, morphology, and functions of primary and permanent dentition.
- Differentiate anatomical characteristics of anterior teeth, premolars, and molars.
- Describe the development and basic histological characteristics of enamel, dentin, cementum, pulp, periodontal ligament, and alveolar bone.
- Explain the stages of tooth development and eruption.
- Identify clinically relevant bones, muscles, salivary glands, and cranial nerves of the head and neck.
- Demonstrate understanding of basic occlusion and Angle's classifications of malocclusion.
- Apply dental morphology terminology to introductory charting, restorative terminology, and radiographic interpretation.
- Demonstrate professionalism, communication skills, organization, and critical thinking consistent with CODA standards and entry-level dental assisting practice.

Assessments

- Open-book quizzes
- LockDown Browser tests
- Final examination
- Hands-on lab activities
- Practical's
- Charting activities
- D2L assignments/uploads
- Participation and professionalism
- Clinical correlation assignments

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

Module 1

Material Covered:

Chapter 8 – Dental Anatomy

Integrated concepts from Chapter 4 – General Anatomy & Physiology

Assessment:

- Open-book quizzes
- Lab activities
- Tooth numbering activities
- Surface identification
- D2L assignments
- Final exam

Objectives:

1. Define terms presented in this chapter.
2. Describe the structure and function of the cell.
3. Describe the levels of organization of the human body.
4. Describe body planes, body cavities, and directional terms of the body.
5. List the composition of bone.
6. Explain the functions and divisions of the skeletal system.
7. Identify the types of joints.
8. Describe the major structures and functions of the following body systems: muscular, nervous, endocrine, cardiovascular, digestive, respiratory, lymphatic, immune, integumentary, and urinary.
9. Explain diseases and conditions of the body systems that affect patients and dental treatment.
10. Explain dental concerns related to the reproductive system.
11. Define terms presented in this chapter.
12. Describe the types of teeth and their functions.
13. Identify the dental arches, quadrants, and sextants.
14. Describe the dentition periods.
15. Locate the surfaces of each tooth.
16. Identify line angles, point angles, and divisions into thirds.
17. Recognize anatomic features of teeth.
18. Identify landmarks of a tooth.
19. Describe the morphology of teeth.

20. Compare and contrast the maxillary anterior and posterior teeth with the mandibular anterior and posterior teeth.
21. Use the Universal Numbering System when identifying teeth.
22. Compare and contrast primary and permanent anterior and posterior teeth.

Module 2

Material Covered:

Supplemental Charting & Clinical Integration Materials

Assessment:

- Charting assignments
- Practical activities
- D2L submissions
- Clinical correlation assignments
- Final practical

Objectives:

1. Demonstrate introductory dental charting procedures.
2. Identify restorative terminology and abbreviations.
3. Apply tooth numbering and surface terminology to charting activities.
4. Differentiate existing and proposed treatment.
5. Demonstrate professionalism and communication skills appropriate for clinical dentistry.

Module 3

Material Covered:

Chapter 6 – Landmarks of the Face & Oral Cavity

Assessment:

- Quizzes
- Oral landmark activities
- Charting assignments
- D2L uploads
- Final exam

Objectives:

1. Define terms presented in this chapter.
2. Identify landmarks in each region of the face.
3. Identify landmarks in the oral cavity.
4. Describe the boundaries of each division of the oral cavity.

5. List the structures in each division of the oral cavity.
6. Describe the soft tissues that surround the dentition.

Module 4

Material Covered:

Chapter 5 – Head & Neck Anatomy

Assessment:

- Quizzes
- Skull labeling activities
- Muscle identification
- Clinical correlation assignments
- Final exam

Objectives:

1. Define the terms presented in this chapter.
2. Identify the bones of the cranium.
3. Identify the landmarks of the face and the oral cavity, including the tongue, floor of the mouth, and salivary glands.
4. Label the landmarks that are important in dentistry of the following: maxilla, mandible, and sphenoid bone.
5. Describe how the parts of the temporomandibular joint (TMJ) are involved in the articulation and movement of the joint.
6. Describe the possible problems associated with the TMJ.
7. Explain the functions of the following: muscles of the head, muscles of mastication, muscles of facial expression, the floor of the mouth, the tongue, and muscles of the neck.
8. Describe the structure of the tongue.
9. Describe the salivary glands.
10. List the salivary secretions.
11. State the major divisions of the nervous system.
12. Identify the nerves of the maxilla and the mandible.
13. List the areas innervated by each cranial nerve in order by name and Roman numeral.

Module 5

Material Covered:

Chapter 7 – Embryology & Histology

Assessment:

- Quizzes
- Histology assignments
- Tooth development activities
- D2L assignments
- Final exam

Objectives:

1. Define terms presented in this chapter.
2. State the developmental stages of the human from fertilization to birth.
3. Describe the development of the human face.
4. Describe the development of the following structures of the oral cavity: upper lip, palate, and tongue.
5. State the role of the pharyngeal arches in the development of the structures of the face.
6. Identify the mechanism leading to development of a cleft palate.
7. Describe the various stages of tooth development.
8. Describe the function of the following in relation to tooth development: dental papilla, dental sacs, and enamel organ.
9. List changes that occur in the inner enamel epithelial cells as they mature to become ameloblasts.
10. Describe the structural properties of enamel.
11. Describe the structural properties of dentin.
12. Compare and contrast among the various types of dentin.
13. Explain the formation of cementum.
14. Identify artifacts that may occur in enamel, dentin, or cementum.
15. Describe each of the four tissues of a tooth.

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. Lecture and Lab need to be passed with a 77% independently of each other to pass the course.

EVALUATION*

Lecture: 60%

Tests	57%
Quizzes	20%
Final Exam	20%
<u>Professionalism</u>	<u>3%</u>
	100%

Lab: 40%	
Assignments	57%
Practical	40%
<u>Professionalism</u>	<u>3%</u>
	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.

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, and Is also negatively impact academic progression and financial aid status.

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 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.**

For online and hybrid courses, refer to your Instructor's Course Information Sheet for any required on-site meeting times. In online courses, attendance is fulfilled through the submission of academic work. Please be aware that instructors may require exams to be proctored either online or at an approved testing site. If you choose to use a testing center other than those provided by HGTC, that center may charge a fee for its services.

Part V: Student Resources



THE STUDENT SUCCESS AND TUTORING CENTER (SSTC):

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

1. Academic tutors for most subject areas, Writing Center support, and Academic Coaching for college success skills.
2. Online tutoring and academic support resources.
3. Professional and interpersonal communication coaching.

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

STUDENT INFORMATION CENTER – TECH Central:



TECH Central offers all students the following **free** resources:

1. Getting around HGTC: General information and guidance for enrollment, financial aid, registration, and payment plan support!
2. In-person and remote assistance are available for Desire2Learn, Student Portal, Degree Works, and Office 365.
3. 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 [Tech Central website](#) for more information. Live Chat and Center locations are posted on the website. You may also call (843) 349-5199.

**HGTC LIBRARY:**

Each campus location has a library where HGTC students, faculty, and staff may check out materials with their HGTC ID. All three HGTC campus libraries have librarians and staff who can aid with research, computers to support academic research and related school-work, and individual/group study rooms. Printing is available as well at each location. Visit the [Library](#) website for more information or call (843) 349-5268.

STUDENT TESTING:

Testing in HGTC courses may occur during regularly scheduled class time or online, with or without proctoring. Tests may be delivered in the following formats:

- Digitally through D2L
- In writing on paper
- Through a publisher platform (note: some publisher platforms carry an associated fee)

Tests may include time limits and may require proctoring depending on the course.

When proctoring is required and is not provided by the course instructor in the classroom, students may complete their test face-to-face at an [HGTC Testing Center](#) or another approved testing site, or online using HGTC's online proctoring provider. For more information about available proctoring options, visit the [Online Testing](#) section of the HGTC Testing Center webpage.

Students testing at an HGTC Testing Center should note the following:

- **Appointments must be scheduled at least 24 hours in advance.**
- **A physical, government-issued photo ID is required to test.**

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. Students seeking accommodations are encouraged to visit HGTC's [Accessibility and Disability Service webpage](#) for detailed information.

It is the student's responsibility to self-identify as needing accommodations and to provide appropriate documentation. Once documentation is submitted, the student will participate in an interactive process with Accessibility and Disability Services staff to determine reasonable accommodations. Students may begin the accommodations process at any time; however, accommodations are **not retroactive** and will only be applied from the point at which they are approved. Students must contact the office **each semester** to renew their accommodations.

For assistance, please contact the Accessibility and Disability Services team at disabilityservices@hgtc.edu or 843-796-8818 (call or text).

COUNSELING SERVICES:

HGTC Counseling Services strives to optimize student success through managing personal and academic concerns that may interfere with achieving educational goals. Staff are available to every student for assistance and guidance on personal matters, academic concerns and other areas of concern. HGTC offers free in-person and telehealth counseling services to students. For more information about counseling services, please reach out to counseling@hgtc.edu or visit the website the [Counseling Services webpage](#).

STATEMENT OF EQUAL OPPORTUNITY/NON-DISCRIMINATION STATEMENT:

Our sincere commitment to both effective business management and equitable treatment of our employees requires that we present this Policy Statement as an embodiment of that commitment to the fullest.

Discrimination is conduct that includes unjust or prejudicial treatment based upon an individual's age, race, color, sex, religion, national origin, disability, and genetic information or any other protected classes deemed unlawful under State or Federal law that excludes an individual from participation in, denies the individual the benefits of, treats the individual differently, or otherwise adversely affects a

term or condition of a person's working or learning environment. This includes failing to provide reasonable accommodation, consistent with state and federal law, to persons with disabilities.

All inquiries regarding the federal laws as they relate to discrimination on the basis of sex may be directed to Jen Riddei, Title IX Coordinator, Horry-Georgetown Technical College, Building 1100C, Room 107B, 2050 HWY 501 E, PO Box 261966, 843-349-5218, Jenifer.Riddei@hgtc.edu.

Student and prospective student inquiries concerning the federal laws and their application to the College or any student decision may be directed to Dr. Melissa Batten, Vice President, Student Affairs, and Section 504 & Title II Coordinator, Horry-Georgetown Technical College, Building 1100C, Room 107A, 2050 HWY 501 E, PO Box 261966-6066, 843-349-5228, Melissa.Batten@hgtc.edu.

Employee and applicant inquiries concerning the federal laws and their application to the College may be directed to Jacquelyne Synder, Vice President, Human Resources and Employee Relations and the College's Affirmative Action/Equal Opportunity Officer, Horry-Georgetown Technical College, Building 200C, Room 205B, 2050 HWY 501 E, PO Box 261966, Conway, SC 29528-6066, 843-349-5212, Jacquelyne.Snyder@hgtc.edu.

TITLE IX REQUIREMENTS:

Title IX of the Education Amendments of 1972 protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination.

HGTC prohibits the offenses of sexual harassment, domestic violence, dating violence, sexual assault, and stalking and will provide students, faculty, and staff with necessary information regarding prevention, policies, procedures, and resources.

Any student, or other member of the college community, who believes that they have been a victim of sexual harassment, domestic violence, dating violence, sexual assault, or stalking may file a report with the college's Title IX Coordinator or campus law enforcement*.

*Faculty and Staff are required to report these incidents to the Title IX Coordinator 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).

All inquiries regarding the federal laws as they relate to discrimination on the basis of sex may be directed to Jen Riddei, Title IX Coordinator, Horry-Georgetown Technical College, Building 1100C, Room 107B, 2050 HWY 501 E, PO Box 261966, 843-349-5218, Jenifer.Riddei@hgtc.edu.

PREGNANCY ACCOMMODATIONS

Under Title IX, colleges must not exclude a pregnant student from participating in any part of an educational program. Horry-Georgetown Technical College is committed to ensuring that pregnant students receive reasonable accommodations to ensure access to our educational programs.

Students should advise the Title IX Coordinator of a potential need for accommodations as soon as they know they are pregnant. It is extremely important that communication between student, instructors, and the Title IX Coordinator begin as soon as possible. Each situation is unique and will be addressed individually.

Title IX accommodations DO NOT apply to Financial Aid. Financial Aid regulations do not give the College any discretion in terms of Financial Aid eligibility.

Certain educational programs may have strict certification requirements or requirements mandated by outside regulatory agencies. Therefore, in some programs, the application of Title IX accommodations may be limited.

To request pregnancy accommodations, please complete the *Pregnancy Intake Form* that can be found [here](#).