DENTAL HYGIENE

**Code:** DHY 110  
**Title:** Dental Head and Neck Anatomy

**Division:** Health Sciences

**Course Description:** This course presents the basic structures of the oral cavity, including the nomenclature, structure, morphology, and function of the teeth. It emphasizes the clinical appearance of the anatomical features of the teeth and points out relationships to adjacent teeth, opposing teeth, and surrounding tissue. It also covers the configuration and function of gross structures of the head and neck and emphasizes the importance of anatomical concepts.

**Prerequisite:** Admission to program, CPR certification.

**Corequisite:** BIO 110, BIO 111, CHE 107, CHE 108, DHY 101, DHY 120, DHY 130

**Credits:** 3 cr.

**Required Materials (Check Bookstore for Latest Edition):**
Click on the bookstore for the supplies which you are attending each class.  
[rcbc.edu/bookstore](http://rcbc.edu/bookstore)

**Course Learning Outcomes:**
Upon completion of this course, students will be able to:

- Describe the normal anatomical structures of the oral cavity proper.
- Identify the components of the periodontium.
- Recognize the normal structures of the oral cavity on models or diagrams.
- Describe the internal and external anatomy and morphology and physiology of each individual tooth of the deciduous and permanent dentitions.
- Document clinical findings of the oral cavity using charting methods taught in class.
- Classify teeth according to dentition, arch, quadrant and tooth.
- State the eruption patterns of the deciduous and permanent dentition according to the standard eruption tables in the textbook.
- Recognize Angle’s classification of occlusion using models, diagrams, or photographs.
- Explain why anatomy, tooth form, position, and functions relate to the prevention of dental disease.
- Correlate the occlusal and intercuspal relationships of the teeth while in centric occlusion and during functional mandibular movements.
- Recognize examples of anomalous teeth.
- Utilize proper nomenclature when discussing anatomical structures of the oral cavity in class and on written examinations.
- Specify the anatomic structures and functions of the temporomandibular joint.
- Locate and describe the function of the paranasal sinuses.
- List the bones of the skull; indicate which are facial and which are cranial bones.
- Recognize the fossae and sutures of the skull.
- Distinguish the muscles of facial expression from the muscles of mastication.
- Indicate the functions of the cranial nerves.
- Outline the drainage of lymph from the head and neck.
- Follow the course of the major vessels of the head and neck.

**General Education Outcomes in This Course:**

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<th>Written and Oral Communication: Communication</th>
<th>* Students will communicate meaningfully with a chosen audience while demonstrating critical thought.</th>
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<tr>
<td>Scientific Knowledge and Reasoning: Science</td>
<td>* Students will demonstrate critical thinking skills in the analysis of scientific data</td>
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<td>Technological Competency or Information Literacy: Technology</td>
<td>* Students will demonstrate the skills required to find, evaluate, and apply information to solve a problem.</td>
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**Core Course Content:**

- Session 1 Clinical Applications
  - Anatomical Nomenclature
  - Normal Anatomical Variation
  - Surface Anatomy
  - Regions of the Head
  - Regions of the Neck
  - Skeletal System
  - Bones of the Head and Neck
  - Abnormalities of Bone
- Session 2 Overview of Dentitions
  - Dentition Periods
  - Dental Anatomy Terminology
- Session 3 Enamel
- Dentin and Pulp
- Periodontium
- Cementum
- Alveolar Bone
- Periodontal Ligaments
- Components of the Periodontium

- Session 4 Permanent Anterior Teeth
  - Incisors

- Session 5 Permanent Anterior Teeth
  - Canines

- Session 6 Permanent Posterior Teeth
  - Molars

- Session 7 Permanent Posterior Teeth
  - Premolars

- Session 8 Primary Dentition
  - Teeth
  - Eruption schedules

- Session 9 Occlusion
  - Normal Occlusion
  - Centric Occlusion
  - Malocclusion

- Session 10 Muscles
  - Muscular system
  - Muscles of the Head and Neck
  - Muscles of the Tongue
  - Muscles of the Pharynx
  - Blood Supply
  - Vascular System
  - Arterial Blood Supply to the Head and Neck
  - Venous Drainage of the Head and Neck
  - Blood Vessel Lesions

- Session 11 Nervous System
  - Nerves to the Oral Cavity and Associated Structures
  - Nerve Lesions of the Head and Neck
  - Anatomy of the Temporomandibular Joint

- Session 12 Glandular Tissue
  - Lacrimal Glands
  - Salivary Glands
  - Thyroid Gland
  - Parathyroid Glands
  - Thymus Gland
  - Lymphatics
Nodes of the Head and Neck
- Tonsils
- Lymphadenopathy
- Metastasis and Cancer

- Session 13 Anatomical Considerations For Local Anesthesia F Ch 9
  - Maxillary Nerve Anesthesia
  - Mandibular Nerve Anesthesia
  - Gow-Gates Mandibular Nerve Block

- Session 14 Fascia and Spaces Spread of Dental Infection
- Session 15 FINAL EXAM Tooth Drawings Due

**Course Activities:**

Course activities vary from course to course and instructor to instructor. Below is a listing of some of the activities students can anticipate in this course:

- **Writing assignments:** students will analyze current issues in the field using current articles from the popular press as well as library research including electronic resources databases.

- **Speaking assignments:** students will present research individually or in groups using current technology to support the presentation (e.g., PowerPoint presentation); students will participate in discussions and debates related to the topics in the lessons. Discussions may also focus on cross-cultural and legal-ethical dilemmas as they relate to the course content.

- **Simulation activities:** Trends and issues will be analyzed for their ethical as well as social or legal significance. Students might role-play common situations for classmates to analyze. Current news articles may be used to generate discussion.

- **Case Studies:** Complex situations and scenarios will be analyzed in cooperative group settings or as homework assignments.

- **Lectures:** This format will include question and answer sessions to provide interactivity between students and instructor.

- **Speakers:** Representatives from various related fields may be invited to speak.

- **Videos:** Related topics will provide impetus for discussion.
EDUCATIONAL TECHNOLOGY:

Rowan College at Burlington County advocates a technology enhanced teaching and learning environment. Advanced technological tools may be used in any course section to facilitate instruction. Many of our sections are web-enhanced, which means that some of your work will be submitted or completed online. Web enhancements may include online materials, grade books, testing and quizzes and assignment submission. Many students enjoy the flexibility and convenience that these online enhancements have provided, however if you have concerns about the technology involved, please speak to your instructor immediately.

STUDENT EVALUATIONS:

The student will be evaluated on the degree to which student learning outcomes are achieved. A variety of methods may be used such as tests, quizzes, class participation, projects, homework assignments, presentations, etc.

See individual instructor’s course handouts for grading system and criteria (point value for each assessment component in course, e.g. tests, papers, presentations, attendance etc.), number of papers and examinations required in the course, and testing policy including make ups and/or retests.

GRADING STANDARD:

A  Mastery of essential elements and related concepts, plus demonstrated excellence or originality.
B+  Mastery of essential elements and related concepts, showing higher level understanding.
B  Mastery of essential elements and related concepts.
C+ Above average knowledge of essential elements and related concepts.
C  Acceptable knowledge of essential elements and related concepts.
D  Minimal knowledge of related concepts.
F  Unsatisfactory progress. This grade may also be assigned in cases of academic misconduct, such as cheating or plagiarism, and/or excessive absences.

For other grades, see the current ROWAN COLLEGE AT BURLINGTON COUNTY catalog.

COLLEGE POLICIES:

The current college catalog and student handbook are important documents for understanding your rights and responsibilities as a student in the RCBC classroom. Please read your catalog and handbook as they supplement this syllabus, particularly for information regarding:

- Academic Integrity Code
- Student Conduct Code
Student Grade Appeal Process

**OFFICE OF STUDENT SUPPORT AND DISABILITIES SERVICES:**

RCBC welcomes students with disabilities into the college’s educational programs. Access to accommodations and support services for students with learning and other disabilities is facilitated by staff in the Office of Student Support (OSS). In order to receive accommodations, a student must contact the OSS, self-identify as having a disability, provide appropriate documentation, and participate in an intake appointment. If the documentation supports the request for reasonable accommodations, the OSS will provide the student with an Accommodation Plan to give to instructors. Contact the Office of Student Support at 609-894-9311, ext. 1208 or visit the website at: www.rcbc.edu/studentsupport

**ADDITIONAL SUPPORT/LABS:**

RCBC provides academic advising, student support personal counseling, transfer advising, and special accommodations for individuals with disabilities free to all students through the Division of Student Services. For more information about any of these services, visit the Laurel Hall on the Mt. Laurel Campus, or call (609) 894-9311 or (856) 222-9311, then dial the desired extension:
- Ext. 1557 Academic Advisement and Counseling
- Ext. 1803 Special Populations
- Ext. 2737 Transfer Center

Or visit the following websites:
- Academic Advising  www.rcbc.edu/advising
- Student Support Counseling  www.rcbc.edu/counseling
- Transfer Center  www.rcbc.edu/transfer

RCBC offers a free tutoring for all currently enrolled students. For more information regarding The Tutoring Center call Extension 1495 at (609) 894-9311 or (856) 222-9311 or visit the Tutoring Center Website at www.rcbc.edu/tutoring

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