

# NYU College of Dentistry Dental Hygiene Program Requirements

Effective for Academic Semesters: Fall 2016- Summer 2017

## **AAS DEGREE PROGRAM**

### Professional Courses

#### **Board Review**

This course measures the ability of students to understand information from biomedical, dental and dental hygiene sciences. The course also assesses the student's ability to apply this information in a problem-solving context.

**(Prerequisites:** Principles of Dental Hygiene II Lecture and Clinic)

(Fall, Summer)

#### **Chemistry for Allied Health**

This course is designed to introduce students to the basic concepts and terminology of general chemistry, organic chemistry and biochemistry, and to provide the foundation for further study of nutrition, physiology, and dental materials.

(Fall, Spring)

#### **Dental Materials**

A study of the compositions and properties of materials used in the contemporary practice of dentistry. Background knowledge and practical experience are provided. Laboratory sessions are integrated with lectures of introductory techniques of manipulation of these materials to be used in a clinical setting.

**(Prerequisites:** Chemistry for Allied Health, Principles of Dental Hygiene I Lecture and Clinic)

(Spring, Summer (FT only))

#### **Ethics**

This course is designed to provide the student with a legal and ethical framework. Students explore the responsibilities involved in hygienist/patient and employee/employer relationships. The legal ramifications of a variety of practice settings are investigated. Through case studies, ethical and professional development is encouraged.

**(Prerequisites:** Principles of Dental Hygiene III Lecture and Clinic)

(Spring)

## **General and Oral Pathology**

Study of fundamental disease processes and specific diseases of the oral region; survey of systemic diseases by organ systems; oral abnormalities, including aspects of treatment, are discussed in conjunction with general topics of cell injury, inflammation, neoplasia, and genetic diseases. Emphasis is placed on the effects of systemic diseases on the dental patient.

**(Prerequisites:** Anatomy & Physiology I and II, Oral Embryology and Histology, and Principles of Dental Hygiene II Lecture and Clinic)

(Fall, Summer)

## **Human Anatomy and Physiology I**

This course is designed to introduce the basic principles of anatomy and physiology to nursing and allied health students. Following an introduction to the organization of the human body, basic chemistry, and basic cell biology, Anatomy and Physiology examines the histology, gross anatomy and functions of organs of the integumentary, skeleton, muscular, and nervous systems.

(Fall, Spring (FT Only), Summer)

## **Human Anatomy and Physiology II**

This course is designed to introduce the basic principles of anatomy and physiology. Following an introduction to the organization of the human body and several body systems in Anatomy and Physiology I, this continuation course examines the histology, gross anatomy and functions of organs of the endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems.

**(Prerequisite:** Human Anatomy & Physiology I)

(Spring, Summer)

## **Human Microbiology I**

This course focuses on the study of the principles of microbiology including the transmission, clinical signs, diagnosis, treatment, and prevention of systemic and oral diseases.

(Fall, Spring (FT only))

## **Human Microbiology II**

This is a continuation of Microbiology I with a focus on the prevention of systemic and oral diseases.

**(Prerequisite:** Human Microbiology I)

(Spring, Summer (FT only))

## **Nutrition and Health**

Fundamental principles of biochemistry and other basic science courses are coordinated with the study of nutrients and their relationship to health. This course offers a theoretical and practical study of fats, carbohydrates, proteins, minerals, vitamins, and water and how they affect the status of an individual's oral health.

**(Prerequisites:** Chemistry for Allied Health, Principles of Dental Hygiene II Lecture and Clinic)

(Fall)

## **Oral Anatomy**

Through lecture, laboratory and independent study, the student is provided the opportunity to learn the development, structure, morphology, eruption, and functions of the primary and permanent dentitions.

(Fall, Spring (FT only))

## **Oral Embryology and Histology**

This course covers both general and oral histology. Introductory lectures in general histology and embryology, followed by a study of the fundamentals of histology and embryology of the head, neck, and oral cavity.

**(Prerequisite:** Human Anatomy and Physiology I, Oral Anatomy)

(Spring, Summer)

## **Oral Health Education**

Principles, practices, methods, and audiovisual materials are used in teaching dental health education to the public in schools and or in community public health institutions. Practical applications are provided by assuming responsibilities for designing, implementing, and assessing community dental health programs.

**(Prerequisites:** Principles of Dental Hygiene III Lecture, Preventive Dentistry & Public Health)

(Spring)

## **Pain Management**

This course will introduce the student to the principles of local anesthesia and nitrous oxide inhalation sedation in dentistry. This course provides competency-level knowledge and clinical experiences in the administration of local infiltration anesthesia and the administration of nitrous oxide/oxygen analgesia. . The pharmacology of the various local anesthetics and vasoconstrictors will be presented, and criteria for selection and its use. Presented will be the systemic toxicity, local complications, and prevention and handling of emergencies. Cardiovascular and pulmonary physiology will be reviewed, and the pharmacology and relationship to the administration of nitrous oxide inhalation analgesia. Students will develop knowledge of the armamentarium of nitrous oxide and oxygen, and competency in the techniques of their administration.

**(Prerequisites:** Anatomy & Physiology II, Pharmacology, Principles of Dental Hygiene III Clinic)

(Spring)

## **Periodontics**

A theoretical and practical study of the various concepts and methods used in describing, preventing, and controlling periodontal disease. Diagnosis, treatment, and prognosis of the diseases are presented.

**(Prerequisite:** Principles of Dental Hygiene I Lecture and Clinic; **Co-requisite:** Principles of Dental Hygiene II Lecture and Clinic)

(Spring, Summer (FT only))

## **Pharmacology**

Lectures consider both theoretical and practical aspects of drug use. Initial discussions center on those principles that control the absorption, distribution, metabolism, and elimination of drugs. In subsequent lectures, the pharmacology of individual drug groups is presented. Their cellular actions, therapeutic uses, and adverse effects are discussed. Emphasis is placed on those drugs of greatest medical use.

**(Prerequisites:** Chemistry for Allied Health, Principles of Dental Hygiene II Lecture)

(Fall)

## **Preventive Dentistry and Public Health**

This course provides an introduction to current principles and issues in public health and their relationship to the delivery of dental care to the public. Students learn basic concepts of health care organization, epidemiology, statistics, program planning, and prevention of dental diseases. Future roles for dental health care providers in a changing health care system are investigated. The role of preventive dentistry in clinical practice is discussed.

**(Prerequisite:** Principles of Dental Hygiene II Lecture and Clinic)

(Fall)

## **Principles of Dental Hygiene I**

Through lecture and laboratory experiences, the student becomes knowledgeable and develops proficiency in providing comprehensive dental hygiene treatment, patient education, and management. Subjects covered are oral inspection, charting, recording medical and dental histories, sterilization, hard and soft deposits, stains, fluoride mechanisms, instrument sharpening, dental and medical emergencies, and oral physiotherapy.

(Fall, Spring (FT only))

## **Principles of Dental Hygiene I Clinic**

The clinic correlates knowledge from the didactic portion of the course to conduction of oral health services on clinic partners. All clinic skills are practiced to proficiency. Students will be certified in cardiopulmonary resuscitation.

**(Co-requisite or Prerequisite:** Human Anatomy and Physiology I; **Co-requisite:** Radiology)

(Fall, Spring (FT only))

## **Principles of Dental Hygiene II**

This course is a continuation of Principles of Dental Hygiene I. The lectures include slide presentations and discussions on various oral manifestations seen in the oral cavity. Some systemic disease processes that have intraoral signs and symptoms are also covered.

**(Prerequisites:** Principles of Dental Hygiene I Lecture and Clinic)

(Spring, Summer (FT only))

## **Principles of Dental Hygiene II Clinic**

This clinic develops professional knowledge and the refinement of techniques required in providing comprehensive dental hygiene treatment to patients. Rotating assignments in dental school clinics provide an opportunity to learn about the responsibilities of various members of the dental health team.

**(Prerequisites:** Principles of Dental Hygiene I Lecture and Clinic; **Co-requisite:** Human Anatomy & Physiology II)

(Spring, Summer (FT only))

## **Principles of Dental Hygiene III**

Through lecture, discussions, reading assignments, and research projects, the students continue to develop professional judgment and skills in providing optimal comprehensive dental hygiene patient treatment.

**(Prerequisites:** Periodontics, Principles of Dental Hygiene II Lecture and Clinic, Dental Materials, Writing Workshop I)

(Fall)

## **Principles of Dental Hygiene III Clinic**

Students continue to develop professional judgment and clinical skills by providing comprehensive dental hygiene treatment including expanded functions to clinic patients and on extramural rotation assignments.

**(Prerequisites:** Periodontics, Principles of Dental Hygiene II Lecture and Clinic, Dental Materials, Writing Workshop I)

(Fall, Spring\*) \*Spring Session 1 credit evening students only

## **Principles of Dental Hygiene IV**

Through lectures, discussions, readings, and writing assignments, the student develops knowledge of ethical and legal issues, professional organizations, résumé writing, job interview techniques, dental office procedures, and management.

**(Prerequisites:** Principles of Dental Hygiene III Lecture and Clinic, General & Oral Pathology, Nutrition & Health, Pharmacology)

(Spring)

## **Principles of Dental Hygiene IV Clinic**

The students continue to develop their cognitive and psychomotor skills in providing preventive dental hygiene services, expanded functions, and nutritional counseling to clinic patients as well as to patients treated through extramural rotation assignments.

**(Prerequisites:** Principles of Dental Hygiene III Lecture and Clinic, General & Oral Pathology, Pharmacology)

(Spring)

## **Radiology Lecture and Laboratory**

Through the use of lectures, slides, and laboratory experiences, this course is designed to provide the student with an understanding of radiation biology, radiation protection, radiographic image receptors, the developing process, and the fundamentals of dental radiography including the projection and production of X-rays. Normal radiographic anatomy, as well as caries detection and the radiographic evaluation of periodontal disease, are discussed. Students learn radiographic techniques on manikins and then proceed to take radiographs for the clinic patients.

**(Co-requisite:** Principles of Dental Hygiene I Lecture and Clinic)

(Fall, Spring (FT only))

## **Liberal Arts Courses**

The College of Dentistry and the Paul McGhee Division work cooperatively to offer these courses through NYU's School of Professional Studies. Students are recommended to take these courses according to their specific track guidelines.

The courses listed below are usually offered throughout the academic year.

## **Intensive Writing**

Intended for students whose Writing Placement Essays indicate that they require more preparation for Writing Workshop I. Students learn to generate ideas; shape and support a thesis; and gain further control over sentence structure, word choice, and grammar. Students also read and analyze various texts to help them, and familiarize themselves with standard English practices. (This course may be taken twice if necessary.)

## **Introduction to Psychology**

This course is an introduction to the fundamental principles of psychology, with emphasis on psychology's major areas of study: personality development, learning, social psychology, physiology, and motivation. Current schools of thought are examined in an historical context. Psychoanalytic, behavioral, humanistic, and cognitive approaches to psychology are reviewed.

## **Introduction to Sociology**

This course is a study of society, groups, and cultures and an introduction to sociological theory as a means for interpreting and understanding human behavior and the human condition. Topics of discussion include the process of social and cultural change, social structure and stratification, roles and gender, the family, and social control.

## **Oral Communications**

A study of the dynamics of the communications process and a workshop in developing effective communications skills. Emphasis is on a wide range of behaviors and situations, from one-to-one interactions to formal presentations.

## **Writing Workshop I**

This course focuses on the individual student's writing and reading skills. Writing is presented as an ongoing evolutionary process. The class emphasizes strategies for generating and clarifying ideas; refining analytical thinking; using evidence effectively; controlling detail and generalization; and developing a sense of audience. Students also become familiar with the skills needed for library research.

**(Prerequisites:** Writing Placement Test, and, where required, Intensive Writing and/or Mastering Correct English and/or Grammar Strategies course at NYU)

## **Writing Workshop II**

This second-level course emphasizes the development of a personal voice, control of style, and independent analytical thinking, while continuing to build confidence and fluency. Analytical thinking is stressed, as is the use of evidence in the context of research and other academic writing. Students expand their information retrieval and research skills.

**(Prerequisite:** Writing Workshop I)

## **BS DEGREE PROGRAM**

BS TRACK A CURRICULUM ALSO INCLUDES ALL AAS CURRICULUM REQUIREMENTS.

COURSE CODES ARE LISTED FOR SCHOOL OF PROFESSIONAL STUDIES AND COLLEGE OF NURSING APPROVED CLASSES.

### **Core Courses**

## **Advanced Business Writing (ORBC1-UC2242)**

This course covers various types of business writing: letters, reports, memos, proposals and manuals. In writing reports, the model of the corporate annual report is used. In writing proposals, both solicited and unsolicited proposals are covered. In writing manuals, students learn how to compile technical information and provide graphic support.

*(Prerequisite: Writing Workshop II)*

*(Fall, Spring) Online course*

## **Statistics I (NURSE-UN80)**

This course is designed to instruct students on how to use statistics for data analysis. The course will make use of SPSS, a statistical software package (Versions 10 or higher.) The first semester will serve as a foundation, covering methods for displaying and describing data.

*(Fall, Spring)*

## **Business Computing**

This course introduces students to the most essential and current concepts of information technology. Students learn basic fundamentals of computer hardware and application software. Utilizing the most contemporary online learning technology, students will have experience using Microsoft Office applications – Word, Excel and PowerPoint.

*(Fall) Online*

## **Critical Thinking (HUMN1-UC6401)**

This course emphasizes analytic thinking by reading texts and being able to evaluate them critically, to analyze structure and their appeals to logic and emotion, to develop criteria for effectively evaluating writing, and to recognize and discuss the many qualities which contribute to effective critical thinking by others, including classmates.

*(Fall, Spring (Online))*

## **Cultural Competence**

This course is designed to explore the concepts of cultural competence as related to the delivery of health care. The students move along a cultural competence continuum towards cultural proficiency. Self-assessment is critical to understanding and applying the concepts.

*(Prerequisite: Writing Workshop II)*

*(Fall, Summer) Online*

## **Internship I & II**

This course consists of fieldwork in areas such as dental research, teaching and dental auxiliary programs, administration of dental facilities and dental health education in selected settings, and business affiliations. Students develop a learning proposal and evaluation mechanism. Fieldwork can occur on or off campus. Faculty advisor approval required prior to registration. Minimum of 50 hours per 3 credit sections, directly supervised each term. Paper required.

*(Prerequisite: Oral Health Education; Co-requisite: Intro to Research Methods)*

*(Fall, Spring, Summer)*

## **Introduction to Health Policy (DHYG3-UD164)/Topics in Healthcare Management (HEAL1-UC2676)**

This is an introductory course designed to provide future healthcare decision makers with foundation of knowledge about the US healthcare delivery system. Some of the topics addressed include the history, financing, and delivery models of health care.

*(Prerequisite: Oral Health Education; Co-requisite: Introduction to Research)*

*(Spring)*

## **Introduction to Research (NURSE-UN120)**

The course provides an overview of the ways that health professionals collect information and the application to the delivery of health care. A combination of approaches is used, including readings about and discussions of research methods; a series of learning activities to provide practical experience in research methods; analyzing research methods examples; and preparing elements of a research proposal. In addition, the course is designed to help provide students with the foundation for locating and evaluating scientific information, and to become informed consumers of completed research.

*(Prerequisites: Statistics - NURSE-UN80 - 3 cr.)*

*(Spring, Summer)*

## **Pain Management**

This course will introduce the student to the principles of local anesthesia and nitrous oxide inhalation sedation in dentistry. This course provides competency-level knowledge and clinical experiences in the administration of local infiltration anesthesia and the administration of nitrous oxide/oxygen analgesia. . The pharmacology of the various local anesthetics and vasoconstrictors will be presented, and criteria for selection and its use. Presented will be the systemic toxicity, local complications, and prevention and handling of emergencies. Cardiovascular and pulmonary physiology will be reviewed, and the pharmacology and relationship to the administration of nitrous oxide inhalation analgesia. Students will develop knowledge of the armamentarium of nitrous oxide and oxygen, and competency in the techniques of their administration.

*(Prerequisites: Anatomy & Physiology II, Pharmacology, Principles of Dental Hygiene III Clinic)*

*(Spring)*

## **Elective Courses**

### **Advanced Allied Dental Education**

This course is an introduction to the theory and practice of dental health teaching and evaluation. Emphasis is placed on behavioral objectives, assessment of instructional procedures, and evaluations. Practical application is provided through assignments and mini-class lecturing.

*(Prerequisite: Oral Health Education)*

*(F)*

### **Advanced Clinical Dental Hygiene Teaching**

The Commission on Dental Accreditation, Dental Hygiene Education Program Guidelines are presented with special emphasis on clinical requirements and their application to preclinical curriculum. Strategies for teaching clinical dental hygiene procedures are presented, with application and teaching experience provided through instruction of students enrolled in a preclinical course.

*(Prerequisite or Corequisite: Advanced Allied Dental Education)*

*(Spring)*

### **Concepts in Community and Public Health**

As healthcare moves toward a more integrative model, career opportunities for dental hygienists in community & public health sectors will expand. This online course outlines the history, evolution and status of health in various levels of community. Students will have the opportunity to gain advanced knowledge of public health issues and initiatives by examining local, state and federal health resources, health objectives for the nation, program planning, promotion, and disease prevention in all aspects of health. Topics include epidemiology, environmental health, drugs, safety, and occupational health. Activities include web based assignments, discussions, lectures, student presentations, in addition to exploring existing community agencies and programs.

*(Prerequisite: Preventive Dentistry & Public Health, Oral Health Education)*

*(Fall) Online*

### **Forensic Dentistry/Emergency Preparedness**

This course is designed to integrate dental hygiene knowledge, apply it and prepare for: the forensic needs of the community, detection and prevention of abuses of humanity, and develop a community advocate who is prepared to play an active role in times of catastrophe.

*(Prerequisite: Oral Anatomy, Radiology)*

*(Spring)*

### **Health Care for the Older Adult**

This course will prepare students for advanced roles in dental hygiene oral health care through a collaborative approach of theory, research and clinical practice. Students will gain in-depth knowledge of the aging process and develop clinical skills necessary for complete health assessment and management of oral issues. The coursework will explore foundational knowledge in healthful aging as well as issues related to chronic illness in the geriatric population. Principles of evidence-based research and practice will be utilized to explore the oral health problems unique to geriatric patients. Students will analyze public policy and the impact of limited access to care.

*(Prerequisites: Principles of Dental Hygiene III Lecture and Clinic)*

*(Spring)*

### **International Perspectives in Dental Hygiene**

In this distance learning course, students will study international oral health and the role of the dental hygienist profession in an international perspective. The studies are problem-based and students will study in a team together with students from different countries. Each team will produce a PowerPoint presentation to be presented at a given date in June. A web-based learning platform will be used. Students must download Skype and ensure they have a working microphone and web camera.

*(Prerequisite: Cultural Competence)*

*(Spring) Online*

### **Women's Health**

This course explores the bio-psychosocial dimensions of Women's health. The course will examine the many factors affecting the health and well-being of women throughout their lifespan. Prevention, health promotion, research, and clinical intervention are the foundations of this course.

*(Prerequisite: Nutrition and Health)*

*(Spring) Online*

### **\*\*Independent Study**

Minimum of 15 hours per point. Cannot be used to satisfy the required dental specialty or Liberal Education Plan requirements. Formal registration and prior faculty approval are required.

*(Offered as needed)*

## **Additional BS Curriculum Requirements**

The College of Dentistry and the Paul McGhee Division work cooperatively to offer these courses through NYU's School of Professional Studies. Students are recommended to take these courses according to their specific track guidelines.

The courses listed below are usually offered throughout the academic year. \*\*Prerequisites will be defined per class through the School of Professional Studies. Please review prerequisite requirements before enrolling.

### **Math**

### **Foreign Language**

### **History/Culture/Arts Electives (Two 4-credit courses required)**

**NOTE: All prerequisite courses must be successfully completed before higher level courses may be taken, unless special permission is given by the Director of the Dental Hygiene Program.**