NYU College of Dentistry Dental Hygiene Program Requirements

Effective for Academic Semesters: Fall 2010- Summer 2013

AAS DEGREE PROGRAM

Professional Courses

*Letter following course descriptions indicate when course is offered: (F)all, (S)pring, (S)ummer*

**Board Review**

This course is measures the ability of students to understand information from biomedical, dental and dental hygiene sciences and also assesses the students’ ability to apply this information in a problem solving context.

Prerequisites: Principles of Dental Hygiene II Lecture and Clinic)

(F, U)

**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.

(F, S)

**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 and Principles of Dental Hygiene I Lecture and Clinic)

(S)

**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)

(S)

**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)

(F, U)

**Human Anatomy and Physiology I**

This course focuses on anatomy of the human body with emphasis on the head, neck, and oral cavity. Other topics include histology, anatomy and physiology of bones, muscles, blood, and nervous systems.

(F)
Human Anatomy and Physiology II

This course focuses on the study of the structure and functions of the human body, integrated with other dental sciences and dental applications.

(Prerequisites: Human Anatomy & Physiology I)

(S)

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.

(F)

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)

(S)

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)

(F)

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.

(F)

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.

(Prerequisites: Human Anatomy and Physiology I)

(S, U)

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.

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

(S)

Pain Management

This course is designed to teach the student management of pain control through the use of local anesthetic agents and the administration of nitrous oxide and oxygen when used as a sedative. The physiology and pharmacology agents, indications and contraindications for use, and the treatment of complications and emergencies are stressed. Other modalities of pain control will be discussed.

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

**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.

(Prerequisites: Principles of Dental Hygiene I Lecture and Clinic. Corequisites: Principles of Dental Hygiene II Lecture and Clinic)

(S)

**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)

(F)

**Preventive Dentistry and Public Health**

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.

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

(F)

**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.

(F)

**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-requisites: Anatomy & Physiology I

(F)

**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)

(S)

**Principles of Dental Hygiene II Clinic**

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

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, Writing Workshop I)

(F, S*) *Spr. Sess 1 cr. eve 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)

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)

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)

Liberal Arts Courses
The courses listed below this area are usually offered throughout the academic year.

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.

(Prerequisite: Writing Workshop I)

**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.)

**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: English Placement Test, and, where required, Intensive Writing 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 and 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.**

**Advanced Business Writing**

Covers three types of business writing: reports, 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)

(F)

**Critical Thinking for the Health Professional**

Students learn the fundamental questions to ask in order to analyze visual and written material. Students interrogate ideas, images, and texts within their rhetorical and historical contexts. They learn various tools for analyzing the structure of arguments and logical strategies. At the same time, students read texts that challenge them to re-examine the cultural realities we take for granted.

(Prerequisite: Writing Workshop II)

(S, U)

**Fieldwork in Dental Health Programs**

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 25 hours per credit directly supervised each term. Paper required.
Introduction to Business Computing

This first course introduces the student to computer hardware components and to the role of operating systems software. Included is a hands-on exploration of Microsoft Windows. The student learns how to use a spreadsheet program to solve many real-world business problems. Hands-on exercises use Microsoft Excel.

Introduction to Health Policy

This is an introductory course designed to provide future health care decision makers with foundation of knowledge about the U.S. health care delivery system. Some of the topics addressed include the history, financing, and delivery models of health care. Course requirements: attendance, class participation, midterm, and final.

Introduction to Research Methods

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.

Basic Statistics I

This introductory course is designed to prepare undergraduate- & master’s-level students to use statistics for data analysis. The course makes use of SPSS for Windows, a statistical computer software package for the social sciences. Topics include frequency distributions & their graphical representations, percentiles, measures of central tendency & dispersion, correlation, & simple regression.

UNRESTRICTED 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.

Advanced Clinical Dental Hygiene Teaching

The Dental Hygiene Accreditation 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.

Advanced Clinical Techniques
This course is designed to provide the product information and clinical demonstration of various new techniques to deliver dental hygiene treatment. Discussion on application of the technology follows each presentation. Students are expected to select a technology, research the product, gather data on it, and present a mini-lecture in technology. As part of the learning experience, the student prepares one abstract suitable for publication in a referred journal. Class participation and attendance are essential.

(F)

**Advanced Nutrition**

This course is designed to bridge basic oral disease prevention such as carbohydrate metabolism and nutritional deficiency manifestations to nutrition and health promotion. Topics will introduce the participant to protein, fat and carbohydrate metabolism, vitamin and mineral metabolism, phytochemical nutrients, exercise physiology and nutrition over the life span including pregnancy, infant, adolescent, adult and geriatric differences. A combination of text book, research journals and articles will be utilized. A topic of interest and presentation to classmates will be part of the evaluation.

(Prerequisite: Intro. to Research Methods)

(S)

**Bioterrorism and Forensics**

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.

(S)

**Community Assessment and Health Promotion**

This course will introduce students to concepts and skills in community needs assessment and to analyze data on community health from a variety of sources. The students learn how to develop objectives for community health, design and present a community-level intervention guided by theories.

(Prerequisites: Advanced Business Writing and Intro. to Research Methods)

(S)

**Independent Study**

Minimum of 45 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)

**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.

(S)

**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.