BASIC SCIENCES (BASCI-DN)

BASCI-DN 5055 Advanced Education Core Sciences (1-7 Credits)
An introductory course. Modules include: Clinical Research Design, Introduction to Biostatistics, IRB Seminar, Emergencies in Dental Practice (Dental/Medical/BLS), Diversity in Practice, Cultural Competence Ethics, Workshop Introduction to EHR and Digital Imaging, Contemporary Caries Introduction to Basic Radiology and CBCT Practice Management. Introduction to Pedagogy.
Grading: Dental Pass/Fail
Repeatable for additional credit: No

BASCI-DN 5056 Advanced Sciences (0.75 Credits)
The postgraduate course in Advanced Sciences addresses Applied Medicine, Pathology and Pharmacology, and will focus on selected critical topics in medicine, oral medicine, pathology and integrated areas of pharmacology presented in a case-based format with introductory background material. All content in this course, assumes mastery of content in the predoctoral curriculum and is presented at a post-graduate level.
Grading: Dental Pass/Fail
Repeatable for additional credit: No

BASCI-DN 7027 Host Response to Infection & Trauma (0.5-1.5 Credits)
The primary goal of this course is to provide the post-graduate specialty student with sufficient background in the innate and adaptive immune response to infection and trauma so that he/she will be able to understand and predict the response of patients to infectious and traumatic (surgical) challenges. A secondary goal is to provide sufficient background in innate and adaptive immunity so that he/she will be able to understand the applications of future advances in these fields as they pertain to his/her clinical specialty.
Grading: Dental Pass/Fail
Repeatable for additional credit: No

BASCI-DN 8043 Clinical Application of Advances in Wound Healing (1.25 Credits)
This course comprises eight seminars and a final exam. The seminars cover classic and current concepts in soft and hard tissue wound healing in the oral cavity environment involving standard dental procedures. The main aim of the course is to provide, for the students, a detailed understanding of the basic science and practical aspects of soft tissue and hard tissue healing as it relates to procedures done in the oral cavity. This includes the cellular and molecular basis of wound healing as well as clinical concepts and practical timelines.
Grading: Dental Pass/Fail
Repeatable for additional credit: No

BASCI-DN 8045 Fundamentals of Anesthesia (0.25-5 Credits)
This intensive didactic introduction to the principles and practice of sedation and anesthesia is designed to prepare first year postgraduate residents/students in Oral and Maxillofacial Surgery, Periodontics, and Pediatric Dentistry for their clinical anesthesia training rotations. This course is a prerequisite for participation in all clinical ambulatory sedation/anesthesia assignments at the New York University College of Dentistry and affiliated hospitals, as well as assigned rotations on the Anesthesiology Service at New York University affiliated hospitals. Students MUST pass this course to be eligible for clinical anesthesia training. Enrollment in this course is limited to first-year postgraduate students in Oral and Maxillofacial Surgery, Periodontics, and Pediatric Dentistry.
Grading: Dental Pass/Fail
Repeatable for additional credit: No

BASCI-DN 8046 Growth & Development I (1 Credit)
Participants will be introduced to various aspects of overall human growth & development and their impact on health. In addition, the growth & development of the dentition will be reviewed as well as the growth mechanisms & concepts associated with the development of the human craniofacial skeleton. Participants will also be introduced to aspects of therapeutic mechanotherapy on the human craniofacial skeleton and their impact on speech, facial growth, and airway function.
Grading: Dental Pass/Fail
Repeatable for additional credit: No

BASCI-DN 8047 Growth & Development II (0.75 Credits)
In this course Growth and Development Part 2, the knowledge gained about growth & development principles presented throughout Part 1 will be expanded upon through presentations of clinically based treatment concerns encountered in clinical practice. Participants will be introduced to various aspects of therapeutic mechanotherapy on the human craniofacial skeleton and their impact on speech, facial growth, and airway function.
Grading: Dental Pass/Fail
Repeatable for additional credit: No

BASCI-DN 8048 Integrative Seminars in Oral Biology I - Oral Systemic Connections (3 Credits)
This course will introduce students to current topics in oral biology research, primarily focusing on the connection between oral diseases and systemic diseases and medical conditions. The aim of the course is to help students develop an integrated understanding of the current state of oral biological science by combining lectures, presentations, discussions, and critical reviews of scientific literature assigned by faculty members in their areas of expertise. Topics include periodontal disease, phage therapy, oral facial pain, tobacco, alcohol, e-cigarettes and cancer, some molecular and clinical characteristics of oral cancers, correlations between oral pathogens and chronic systemic inflammatory diseases, Sjogren’s Disease.
Grading: Dental Graded
Repeatable for additional credit: No

BASCI-DN 8049 Integrative Seminars in Oral II - Bone Biology & Craniofacial Development (3 Credits)
This course introduces fundamental concepts of skeletal and craniofacial biology, particularly embryonic and adult skeletal and cartilage development. Topics covered are: understanding of craniofacial bone growth, tooth development, cartilage biology, endocrine regulation of the skeletal integrity, and skeletal biomechanical properties. The goals of the course are threefold: 1) to provide “fundamental knowledge” of skeletal and craniofacial growth and development, 2) to apply the principles of biologic processes to their clinical manifestations, and 3) to develop critical reading of scientific reports in the research field of hard tissues.
Grading: Dental Graded
Repeatable for additional credit: No

BASCI-DN 8050 Directed Individual Research in Oral Biology (1-4 Credits)
Supervised research
Grading: Dental Pass/Fail
Repeatable for additional credit: No

BASCI-DN 8051 Directed Individual Research in Oral Biology II (1-4 Credits)
Supervised research
Grading: Dental Graded
Repeatable for additional credit: No
BASCI-DN 8057  Reading in Oral Biology  (1 Credit)
Student reads and presents on an assigned topic
Grading: Dental Graded
Repeatable for additional credit: No

BASCI-DN 8058  Reading in Oral Biology II  (1 Credit)
Student reads and presents on an assigned topic
Grading: Dental Graded
Repeatable for additional credit: No