### COURSE DESCRIPTIONS

First Professional Level: Doctor of Dental Medicine (DMD)

### CBIO 7100 - Biochemistry. Eighty one (81) hours.

This is a lecture—type course with the purpose of facilitating the learning of basic biochemical concepts and knowledge that would allow the students to understand, at the molecular level, the normal and pathological processes that occur in human beings.

### CBIO 7110 - Gross Anatomy. One hundred and eight (108) hours.

The course presents human macroscopic anatomy with an emphasis on regions and topics of concern to the dental curriculum. Head and neck are treated in the greatest detail, followed by the proximal segments of the upper limb, focusing particularly on the brachial plexus and thoracic viscera. Abdominopelvic viscera are presented as an overview. Images (radiographs, CT, MRI) and clinical relevance are incorporated, especially in head and neck and to a lesser degree in coverage of thorax. The peripheral nervous system is treated with special focus on pathways of pain sensation. Instructional methods are structured lectures, in power point, followed by supervised dissection of cadaveric specimens.

#### CBIO 7120 - General Histology. Eighty (80) hours.

This course is intended to provide the dental student with a thorough knowledge of the normal microscopic structure of cells, tissues and organs. Throughout the course, special emphasis is placed in the correlation of structure and function at both, light and electron microscopes levels. A series of lectures are devoted to the topic of Cell Biology in order to provide the student with the basic ultrastructural knowledge to understand and integrate the details of function and molecular structure learned in other courses such as Biochemistry, Physiology, Pathology, Immunology and Pharmacology.

#### CBIO 7130 - Neuroanatomy. Sixty (60) hours.

The course is a complete presentation of basic human Neuroanatomy with more emphasis given to cranial nerves and mechanisms of tactile sensation. Principal instructional methods are lectures and laboratories, which focus on study of prosections of brain specimens.

### CBIO 7140 - Oral Histology and Embryology. Forty (40) hours. Pre-requisite: CBIO 7120.

This course is designed to provide the student with sufficient knowledge in the development and histology of those parts of the face and mouth that he will encounter throughout his career in Dentistry. Emphasis will be placed on the clinical applications areas which will be studied throughout the course. The course is based on lectures and laboratory with microscopic exercises.

#### CBIO 7150 - Microbiology. Eighty four (84) hours.

The course emphasizes fundamental principles of the genetics, growth, metabolism and death of microbes. These principles are balanced with medical and dental aspects of host–parasite relations, immunologic phenomena, and the biological and clinical manifestations induced by major pathogens. Stress is placed on organisms related to dental caries and periodontal and periapical diseases. Further, the student should understand the influence of microorganisms and associated biologic phenomena have on patient health. The course is based on lectures, laboratory exercises and clinical correlations.

### CBIO 7160 – Basic Human Physiology for Dental Students. Ninety two (92) hours. Pre-requisites: CBIO 7100, CBIO 7110, CBIO 7120, CBIO 7130, CBIO 7140, CBIO 7150.

The course will offer basic physiological knowledge necessary to understand the essential facts and concepts of human physiology, in order to be able to make clinical judgments on a rational scientific basis. The course will be offered using different teaching modalities which include lecture and group discussions.

# CBIO 7170 – General Systemic Pathology. Fifty seven (57) hours. Pre-requisites: CBIO 7100, CBIO 7110, CBIO 7120, CBIO 7130, CBIO 7140, CBIO 7150.

General and Systemic Pathology is a lecture—type course, which will present the knowledge of fundamental disease processes that affect the cells, tissues and organ systems of the body.

### CBIO 7180 - Oral Pharmacology and Therapeutics. Seventy four (74) hours.

Oral Pharmacology and Therapeutics emphasizes basic aspects of Pharmacology with emphasis on dental applications. It is delivered by the faculty of the Department of Pharmacology and Toxicology of the Medical Sciences Campus School of Medicine, with the collaboration of several faculty of the School of Dentistry. This course is intended to acquaint the student with the basic principles of Pharmacology emphasizing the mechanisms of action, secondary effects and drug interactions and prescriptions and drugs in common use Dentistry and Medicine. The course is taught using lectures and clinical correlations.

#### CBIO 7190 - Integration of Biomedical Sciences into Dental Practice. Fifty (50) hours.

The purpose of this course is to provide the dental student with the opportunity to correlate basic science courses and topics with the dental clinical management of patients presenting medical conditions. The course will be conducted using the Case Based Learning Strategy.

# CBIO 7300 — Remedial Course for National Board Dental Examination Part I. Zero (0) credit. Prerequisites: Approved Third Year.

This is an independent study course for students who have not approved the National Board Dental Examination Part I after finalizing their Junior Year. Approval of Part I of this exam is required for promotion to Senior Year. This course will offer an intensive study period to prepare for this exam. Grading System: Passed (P), Not Passed (NP).

#### DESP 7117 – Introduction to Professional Development I. Twelve (12) hours.

This introductory course using lectures and seminar expose the student to the general characteristics that defines the dentists as a health professional. It will also expose the student to the dentist role in community health and to health and basic infection control concepts. Grading System: Passed (P), Not Passed (NP).

#### DESP 7127 - Introduction to Professional Development II. Twenty two (22) hours.

The course will provide the dental student with an understanding of the health management of patients following universal precautions and reducing to the least the probability of cross—contamination or exposure to any infectious disease or health hazard. The course will introduce the occupational hazards in the dental environment and will provide an understanding of the importance of ergonomics in the dental setting. The course will provide the student with concepts related to the ethics in the treatment of patients and the legal aspects of federal and state laws related to infection control and risk management. The methodology of the course includes lectures, discussion, use of audiovisual aids, presentation of topics by students, projects performed by students and "hand—on" exercises in the clinical setting.

#### DESP 7237 – Evaluation of Scientific Literature and Epidemiology. Twenty (20) hours.

The purpose of this course for the dental students is to develop the basic skills necessary to interpret scientific literature. The course topics are presented through three general components: Research Design, Biostatistics, and Epidemiology. The course is conducted using lectures, exercises and group discussion.

#### DESP 7247 - Introduction to Community Dentistry. Twenty (20) hours.

This course offers the students the opportunity to analyze the community concept as the focus of attention and analysis for health care. It presents public health as an integral model for the interpretation of health concepts and health priorities in the community. In addition, team work is emphasized as essential in community health problem—solution oriented strategies.

#### DESP 7357 - Professional Development III. Sixty (60) hours. Pre-requisites: DESP 7117, DESP 7127.

This course has two components. The First Part is concerned with the discussion and analysis of those laws which govern the dentist's professional relationship with the Commonwealth of Puerto Rico, with the patient, and with colleagues. It also introduces the dental student to a series of ethical issues within Dentistry and provides the opportunity to apply ethical principles to clinical situations. The Second Part of the course provides the necessary knowledge and skills to promote effective management of a dental practice. It will develop in the dental student the basic skills to relate effectively with peers, staff and patients; to apply the principles of management and to develop strategies to establish and maintain a dental practice.

# DESP 7401 — Ethical, Social and Legal Issues Relevant to the Healthcare Professional Viewed through Film. Thirty six (36) hours.

This course is aimed to the role of the health professional in society. Health professionals have a unique social position that allows the role of critical thinker, community leader, policies shaping, and role models. The course will allow creativity in approaching emerging societal issues and critical thinking in providing insight and solutions. Emphasis will be placed on legal, administrative and policy issues in Healthcare. The student will select a movie or publication relevant to a healthcare law, a social, administration or policy issue, problem or controversy. The student should analyze the situation and from the health professional point of view, lead his classmates in a thorough discussion. Ethical reasoning and legal principles learned in required prior courses will be applied to social issues. The emphasis is to use those ethical and legal reasoning skills and knowledge to analyze critically controversial issues, particularly related to healthcare.

### DESP 7405 — History of Dentistry. Twenty four (24) hours. Pre-requisites: Approved Third Year Curriculum.

This is an elective course directed to Fourth Year students. The course will cover the subjects of pre—history and history of the human beings from the perspective of Dentistry. Also, the development of the dental profession and its contribution to the improvement of mankind will be discussed. This course will be offered through lectures, group discussions, student's presentations, analysis and discussion of documentaries, as well as, visits to museums and historical and archaeological sites, among others.

# DESP 7406 – Management and Financial Aspects of the Dental Practice. Twenty four (24) hours. Prerequisites: Approved the Third Year of the curriculum.

This is an elective course which will expand and elaborate on the topics taught in the required Private Practice Administration course. The students will also acquire knowledge and develop skills in areas such as basic economics, credit, financial planning, insurance, marketing contracts and related laws for the optimum functioning in the administration of the dental offices. The course consists of topic presentations, lectures, group discussion exercises and individual practice.

### DESP 7407 – Prepaid Plans in Dentistry. Thirty six (36) hours. Pre-requisites: Approved Third Year of studies.

This course will provide the dental students with an understanding of the prepaid dental plans in the practice of Dentistry. It will introduce the past, present and future of prepaid plans, including background information and understanding of the health insurance industry profile and the regulation agencies in Puerto Rico. The course will provide students with concepts related to dental coverage, policies and dental provider's agreement, including quality assurance and dental managed care. The methodology of the course includes lectures, discussion panels, laboratory experiences, and presentation of projects performed by students. The laboratory will provide students with the opportunity to practice the theory presented in the course utilizing a dental computer program, as well as practicing in a dentist's office.

# DESP 7411 – Research Experiences in Dentistry. Thirty six to one hundred and twenty (36–120) hours. Pre-requisites: Third Year approved.

This course provides dental students the opportunity to explore a variety of research experiences. These experiences include activities in research laboratories, dental schools or other institutions in Puerto Rico, the United States or other countries. Knowledge and skills in research methods are developed through active participation in research activities under the supervision of a mentor.

# DESP 7467 — Dental Practice Externship. One hundred and twenty (120) hours. Pre-requisites: First, Second and Third Year approved.

This extramural dental experience course is directed to the senior dental students. The course is designed with the purpose that students develop awareness and better understanding of dental health problems in Puerto Rico as well as positive attitude and willingness to contribute to the solution of such problems. At the end of the course they will understand different primary dental health care services modalities being given to underserved populations. In addition, the student will be able to deliver services and apply the experiences gained to refine, integrate and enhance knowledge, skills and attitudes necessary to perform comprehensive patient care. This experience may also encourage the student to consider serving in underserved areas in the future, and develop their cultural competence in the delivery of oral health care.

### EVDI 7105 - Introduction to Assessment and Diagnosis of the Patient. Thirty eight (38) hours.

Through lectures and class discussions, this course is intended to introduce the student to the art of history taking and patient interviewing. The student will develop skills in communication that will enable him or her to establish the proper rapport with the patient and arrive at an initial assessment. The student will also be introduced to some aspects of gathering clinical data such as recording vital signs. The course will also offer the theory and practice of basic cardiac life support (CPR) and its protocols. At the end of the course, the student will have the opportunity to practice his/her interviewing skills with real standardized patients in a clinical setting.

### EVDI 7115 — Human Development and Behavioral Management. Forty four (44) hours. Pre-requisite: DESP 7117.

This course will study primarily the human being in his life cycle. It recognizes the human being as an integral self with equal intensity in the psychosocial and biophysiologic aspects. Understanding these two dimensions is of vital importance in the process of establishing a treatment plan that satisfies the patient bio—psychosocial needs. In the Second Part of the course, knowledge regarding human growth and development will be applied to the behavioral management of the patient. This will establish an effective dentist—patient relationship, resulting in an uplifting clinical and interpersonal dental experience for both the patient and the dentist. In addition to seminars and lectures, Problem Based Learning will be used as a primary instructional strategy during this course.

#### EVDI 7125 - Dental Anatomy and Functional Occlusion. One hundred and twenty seven (127) hours.

This is a two part course consisting of lectures and demonstrations concurrent with laboratory sessions. In the First Part of the course, the students will have the opportunity to learn the morphology and anatomy of the human teeth, their function and their immediate associated parts. The student will reconstruct in wax the coronal portion of permanent maxillary and mandibular teeth following the correct contour and morphology. The Second Part consists of a series of presentations on the basic knowledge of occlusion. The student will mount study casts in a semi-adjustable articulator and wax-up opposing posterior quadrants on the casts. The cast will be waxed to a functional occlusion using a modified addition waxing technique according to the setting of the articulator.

### EVDI 7135 – Dental & Craniofacial Imaging. Twenty (20) hours. Pre-requisite: CBIO 7110. Co-requisite: EVDI 7125.

This is a lecture and seminar course designed to familiarize the student with the physical nature of X–Ray radiation, radiation health, types of radiographs, radiographic techniques, and radiographic interpretation for the practice of Oral and Maxillofacial Radiography. Concepts of radiographic processing techniques, quality evaluation, and rectification procedures will be discussed.

### EVDI 7245 - Development of the Orofacial Complex. Sixteen (16) hours. Pre-requisites: CBIO 7110, CBIO 7120, CBIO 7140, CBIO 7160.

This course is designed to provide the sophomore dental student with basic knowledge in physical growth and development of the craniofacial complex. This field constitutes essential knowledge for the practice of Dentistry especially in the areas of Orthodontics and Pedodontics. The course includes lectures and discussion of topics from recent scientific literature.

### EVDI 7255 - Oral Pathology. Twenty eight (28) hours. Pre-requisite: CBIO 7170.

The dentist been a specialist in the oral and para—oral areas must be acquainted with the normal and pathological processes seen in the oral and as well as surrounding maxillofacial structures. Therefore, weekly lectures and group discussion of individually assigned subjects, clinical and microscopic documentation of oral disease are presented and analyzed. It includes oral manifestations of systemic diseases in the following categories: 1) disturbances in development and growth, including neoplasia; 2) diseases of microbial origin, including dental caries; 3) and repair; 4) disturbances in metabolism, including nutrition; and 5) diseases of specific systems, such as bones and joints, blood and blood—forming organs, periodontium, skin, nerves, and muscles.

# EVDI 7265 — Oral Diagnosis and Treatment Planning. Fifty seven (57) hours. Pre-requisites: First Year Curriculum, and Second Year Curriculum (weeks 1 to 20).

This is an integrated course with the participation of faculty from the Restorative and Surgical Sciences Departments. The main goal of the course is to initiate students in the development of the diagnosis and treatment planning competency. Concepts will be presented through lectures, seminars, and case presentations. These concepts include extra and intraoral examinations, charting, records and diagnosis aids. Theory and practice in the development of a treatment plan is also included in the course.

# EVDI 7266 – Integration of Oral Medicine and Diagnostic Skills with Oral Pathology: Advanced Course. Forty (40) hours.

The purpose to combine or include with oral pathology is to present the histological pathophysiology of the discussed lesions viewed in previously lectures. At the end of each lecture, case based clinical pathologic correlations (CPC) will be presented to senior dental students to increase their diagnostic acumen, knowledge of disease treatment, disease prognosis as well as criteria or parameters for patient referral to appropriate medical or dental specialist. These case based presentations will engage and encourage students rational thinking in order to achieve a workable differential diagnosis. Ideally, at the end of each (CPC) presentation the student is expected to provide at least three sound and workable differential diagnoses. They will be challenged by the course faculty and student is expected to defend plausibility of their diagnosis. Grading System: Passed (P), Not Passed (NP) since August 2015.

# EVDI 7275 — Assessment and Diagnosis of the Child and Adolescent. Seventeen (27) hours. Prerequisites: EVDI 7115, EVDI 7245.

This is a lecture, discussion and laboratory integrated course with the participation of faculty from the Orthodontics and Pediatric Sections focused on the evaluation and diagnosis of the child and adolescent patient. The concept of parental consent, history taking, orofacial exam, habits, etiology of malocclusion, radiology and caries assessment in children as well as detection and report of signs of abuse and neglect will be presented.

### PRET 7106 - Cariology. Sixteen (16) hours.

This is a lecture and seminar type course which will discuss fundamental biological, epidemiological and clinical aspects of dental caries. The knowledge provided in the Cariology course is essential for understanding the rationale behind preventive, diagnostic, and therapeutic methods for the control of dental caries.

### PRET 7116 - Preventive Dentistry. Forty four (44) hours. Pre-requisite: CBIO 7100.

The concepts of prevention, philosophy of Preventive Dentistry, levels of prevention and primary preventive measures are discussed in this course. Emphasis is given in the maintenance of oral hygiene by education, products, and techniques. Oral prophylaxis instrumentation techniques and application of nutritional concepts as part of primary prevention and oral health maintenance are also presented in the course. This course is presented by lectures, seminars, laboratories, and clinical experience.

# PRET 7126 — Introduction to Restorative Dentistry and Principles of Intracoronal Restorations. Two hundred and fifty (250) hours. Pre-requisites: CBIO 7170, EVDI 7125, PRET 7106.

This course consists of a series of lectures, and laboratories with natural and ivorine teeth, as well as, dental simulator laboratory and clinical experiences, intended to provide the students with the basic knowledge and skills, necessary for an adequate performance in the field of Operative Dentistry during their clinical practice. The course will cover the basic treatment of carious lesions that need to be restored with composite resin, amalgam, cast gold and porcelain dental materials. It has been designed to address from the minimal invasive interventions to more complex situations of severely affected teeth. It includes fissure sealants, vital bleaching techniques and an overview on new materials for preventive and aesthetics considerations. Emphasis will be given to the principles of cavity preparation and restoration of individual teeth under a philosophy of prevention and preservation of tooth structure.

### PRET 7136 — Clinical Application on Dental Skills. Fifty four (54) hours. Pre-requisites: EVDI 7125, EVDI 7135, PRET 7106, PRET 7116.

This course will introduce the student to the clinic by experiences in three areas: Radiology, Preventive Dentistry, and Functional Occlusion. In the Dental Imaging Rotation Radiograph, taking, processing, mounting and interpretation will be performed. In the area of Preventive Dentistry, the student will perform oral prophylaxis procedures. Diagnostic casts will be prepared and mounted in a semi-adjustable articulator in the area of Functional Occlusion.

### PRET 7216 — Treatment for the Child and the Adolescent. Seventy nine (79) hours. Pre-requisite: EVDI 7275.

This is an integrated course involving faculty from the sections of Pediatric Dentistry and Orthodontics which includes lectures, demonstration and laboratory exercises. It encompasses all contemporary concepts in managing the oral health of children and adolescents. The course begins during the last months of the sophomore year and extends through the first semester to adequately bridge the gap between pre-clinical and clinical levels.

### PRET 7246 — Removable Prosthodontics. Two hundred and fifty three (253) hours. Pre-requisite: EVDI 7125.

This lecture and laboratory preclinical course provides dental students with the knowledge of the clinical and the laboratory procedures necessary to be able to construct removable complete and partial dentures. The teaching material is presented in a sequential and integrated manner combining and relating it to other laboratory and clinical procedures which are pertinent in Removable Prosthodontics. Preventive techniques in design couple with sound biomechanical principles in the construction of RPD are stressed in this course. Students are also required to do independent study to expand their knowledge and to correlate the laboratory with the clinical environment.

# PRET 7257 — Periodontics. Fifty five (55) hours. Pre-requisites: First Year Curriculum, EVDI 7245, EVDI 7255, EVDI 7265.

This is a lecture and discussion course which presents students the general concepts of the theoretical basis of periodontal practice and the science and art of the surgical procedures. During the course the student will be able to integrate the philosophy of comprehensive treatment of various periodontal, dental restorative, endodontic, orthodontic, prosthodontic, and medical measures that are necessary to treat periodontal problems. It is expected that students formulate plans to suit the physical, psychological, and financial needs of the individual patient.

#### PRET 7266 - Oral Surgery. Thirty (30) hours.

Through lectures and group discussion is expected that students will learn the basic principles of undergraduate Oral Surgery. The student is introduced to the subject in a progressive sequence, from the first meeting with the patient to the removal of teeth. Problems and complications related to the patient are presented.

#### PRET 7276 - Fixed Prosthodontics. Two hundred and fifty (250) hours. Pre-requisite: EVDI 7125.

This course through lectures, discussion, laboratory, and clinical practice presents the principles of fundamentals in Fixed Prosthodontics. All basic crown and fixed prosthodontics dental preparations and restoration techniques are discussed, studied, demonstrated and done in order to prepare the student for an optimal clinical performance in the comprehensive treatment of dental patients. The mechanical, biological and dental material considerations related to Fixed Prosthodontics will be emphasized based on the concept that a dental restoration is a biological necessity.

### PRET 7277 — Pediatric Dental Treatment. Thirty two (32) hours. Pre-requisites: First Year Curriculum, EVDI 7275.

This course is designed to provide the sophomore dental student with all the contemporary concepts in managing the oral health of non-medical compromised children and adolescents. It includes topics of restorative techniques, pulpal therapy in primary and mixed dentition, space maintenance, behavior management and local anesthesia techniques applied to pediatric dentistry. Emphasis is made in the importance to integrate all information compiled through the diagnostic records and the clinical exam in order to design and deliver a comprehensive treatment to the patients. The course includes lectures, demonstrations, assigned readings and laboratory exercises.

# PRET 7286 — Apprehension and Pain Control. Twenty two (22) hours. Pre-requisites: CBIO 7110, CBIO 7130, CBIO 7180, EVDI 7135.

Through lectures, discussion, and clinical demonstrations, students are introduced in the application of the psychological and chemical modalities for the prevention and treatment of pre-operative and post-operative patient apprehension and pain control.

#### PRET 7296 - Endodontics. Seventy six (76) hours. Pre-requisites: First Year Curriculum, EVDI 7255.

This course for dental sophomore students consists of a series of lectures, seminars, demonstrations and laboratory exercises related to the prevention and treatment of pulpal and periapical diseases. The rationale and armamentarium for conventional root canal therapy, vital pulp therapy, apexification, management of pulpal disorders of traumatic origin and endodontic surgical procedures are discussed in this course. Laboratory includes exercises to perform conventional root canal therapy in acrylic teeth. This course is required for the Endodontics Clinical Rotations and the Comprehensive Care Clinic.

# PRET 7298 — Orthodontic Treatment Planning. Fifty seven (57) hours. Pre-requisites: First Year Curriculum, EVDI 7275, EVDI 7245.

This course is designed to develop the basic knowledge in Orthodontics for the practice of General Dentistry. Topics covered are treatment of malocclusions in the deciduous and mixed dentition of the child and adolescent, as well as the identification and referral of corrective orthodontic malocclusion treatments in the permanent dentition. The course includes lectures, group discussions and laboratory exercises.

# PRET 7300 - Preparatory Clinical and Academic Integration for International Students. One hundred eighty (180) hours.

This course, designed for internationally-trained dentists admitted to the Advanced Placement Program, consists of a series of lectures, seminars, demonstrations, and laboratory exercises related to the diagnosis, prevention of treatment of diseases, disorders and conditions of the oral cavity. The general objective of this course is to enable the student the opportunity to integrate the knowledge and skills previously obtained with the clinical and academic philosophy of the School of Dental Medicine, as well as with the criteria, equipment, and armamentarium used at the school. As a result they will be prepared to enroll the third clinical year in the regular Dental Medicine Doctorate Program. Grading System: Passed (P), Not Passed (NP).

# PRET 7306 — Implant Dentistry Clinical Rotation. Twenty (20) hours. Pre-requisites: Second Year approved. Co-requisites: PRET 7366.

In this course, Dental Medicine student has the opportunity to deal with the clinical and practical aspects of dental implants. Students will integrate Biomedical Sciences and the Theory of Implant Dentistry to the clinical disciplines in order to carry out the necessary diagnostic and therapeutic skills to perform dental implant restorative treatments. The student will develop the skills for the prosthetic dental implant restoration of a simple dental implant case. It is expected that Dental Medicine students recognize dental implants as a primary line of treatment for the management of partial or total edentulism.

# PRET 7308 — Periodontics Clinical Rotation. Sixty four (64) hours. Pre-requisites: Approval of First and Second Year.

This course will comprise 64 student/patient contact hours, divided in 23 clinical rotations during the Junior Year. During the course the students will be able to integrate into a philosophy of comprehensive treatment the various periodontal, dental, restorative, endodontic, orthodontic, prosthodontic, and medical measures that are necessary to treat periodontal conditions. They will develop the capability and flexibility of formulating plans to suit the physical, psychological, and financial needs of the individual patient. In addition, they provide the initial phase of treatment that will include prophylaxis and oral hygiene instructions with four quadrants of scaling and root planning and a periodontal reevaluation to two periodontal patients.

### PRET 7316 - Dental Care for the Special Patients. Twenty eight (28) hours.

In the treatment for the special patients the dentist faces many features different from the normal. It is important to understand the basic differences from the normal in order to provide a comprehensive care to this population. This course is designed to provide the undergraduate dental student the basic theoretical knowledge necessary as background for the dental care of the disable patient. The course consists of lectures and discussion sessions on topics related to various physical, mental and emotional handicapping conditions.

### PRET 7318 – Endodontics Clinical Rotation. Forty seven (47) hours. Pre-requisites: First and Second Year Curriculum.

This course is designed to provide the students with enough patient experience for the development of clinical competence in the field of Endodontics. The clinical experience will substantiate the background of theoretical Endodontics especially in the treatment of pathological pulpal and periapical problems.

# PRET 7326 — Review for the National Board Dental Examination Part II. Fifty four (54) hours. Prerequisites: First and Second Year approved.

This is a review course to prepare students for the National Board Dental Examination Part II. Short lectures on the topics covered in the examination, discussion of board type questions, and practice exams will be provided. At the end of the course a practice test will be administered. Grading System: Passed (P), Not Passed (NP).

### PRET 7328 — Pediatric Dentistry Clinical Rotation. Fifty five (55) hours. Pre-requisites: EVDI 7275, PRET 7216.

This is a clinical course of one year duration. Students will apply the knowledge and will continue developing skills and techniques regarding Dentistry for the child and adolescent patient presented during the Sophomore didactic course. During this course each student will rotate through the Pediatric Dental Clinic as outlined on the clinical rotation schedule. Two new cases and one recall patient will be assigned by means of the course coordinator.

#### PRET 7336 – Advanced Oral Surgery. Twenty (20) hours. Pre-requisite: PRET 7266.

This course presents advanced and complicated topics about Oral and Maxillofacial Surgery. The Junior students are exposed to the special considerations that should be taken in the diagnosis, management and treatment of Oral and Maxillofacial Pathology, trauma, tempero mandibular joint/tempero mandibular dysfunction, dentofacial deformities and pre-prosthetic surgery. Lectures, case presentations, and discussions are used as the main teaching method.

#### PRET 7338 - Orthodontic Clinical Rotation. Sixty (60) hours. Pre-requisites: EVDI 7275, PRET 7216.

This course will provide the student with a series of clinical experiences that will give them the opportunity to apply the basic knowledge and skills acquired during the Pre-Clinical Orthodontic Training. This course is also intended to give the student the opportunity to develop optimal performance in diagnostic and clinical skills in the prevention, interception, and correction of carefully selected malocclusions in the primary and mixed dentitions.

#### PRET 7346 - Clinical Occlusion and TMD Management. Twenty (20) hours. Pre-requisite: EVDI 7125.

This course will be concerned with basic Anatomy and Physiology of the Stomatognathic System and methods of examining the patient in pain and dysfunction. The course will be offered through lectures and discussion, and the method for solving occlusal problems cases will be illustrated. Procedures for diagnosing temporomandibular joints, occlusal, mandibular muscle, vascular and cranial nerve pathology or dysfunction will be outlined. Different types of temporomandibular joints internal derangement and arthritis will be described and methods of diagnosing them will be presented.

### PRET 7348 - Preventive Dentistry Clinical Rotation. Forty (40) hours. Pre-requisite: PRET 7116.

This is a clinical course where the students expose the patients to the primary preventive procedures they need and are available today, in the control of caries and periodontal disease. Students are expected to apply all the preventive methods and procedures learned in prior preventive dentistry courses.

### PRET 7356 - Medical Emergencies. Sixteen (16) hours. Pre-requisites: First and Second Year approved.

The advances in Modern Medicine allow the medically ill patients to live longer and healthier lives; but at the same time, these patients will look for dental care, exposing the dentist to a more medically compromised population. The dentist must be prepared to understand and manage this kind of patient. He must be prepared to evaluate; prevent and manage medical emergency situations that may arise during dental treatment. This course is designed to train the dental students in the evaluation prevention and management of a wide variety of medical emergencies, through lectures, demonstrations; emergency room rotations, live workshop and emergency drills.

### PRET 7358 — Operative Dentistry Clinical Rotation. Eighty six (86) hours. Pre-requisites: Approval of First and Second Year.

This course provides the Third Year student with the initial clinical experiences in Operative Dentistry necessary for the development of the competencies expected of graduates. Students will apply and integrate the knowledge acquired in the pre-clinical courses while performing operative procedures with patients in a clinical setting. The course has a duration of one year and is required for the promotion of the student to the Senior Year Comprehensive Care Clinic. During the year the student will perform clinical activities in clinical rotations.

### PRET 7366 - Implant Dentistry. Twelve (12) hours. Pre-requisites: First and Second Year Curriculum.

This course is an introduction to Dental Implantology as a treatment modality in the management of partial or total Edentulism. It integrates the basic sciences and clinical disciplines in order to present the scientific basis of successful treatment with dental implants. Covers the biological and biomechanical principles of successful treatment with osseointegrated implants. Includes the surgical protocol used for the successful and predictable insertion of dental implants, the evaluation and selection of patients, and treatment planning when considering patients for prosthetic treatment. Treatment options, limitations and possible complications when treating patients with dental implants are also presented. Maintenance of patients with prosthetic treatment over dental implants is also presented. This content is presented through lectures with digital audiovisual aids, case presentations, demonstrations, clinical practice, and laboratory.

### PRET 7368 – Fixed Prosthodontics Clinical Rotation. Sixty (60) hours. Pre-requisites: EVDI 7125, PRET 7276.

The Third Year clinical course in Fixed Partial Prosthodontics is designed to provide the Junior dental student the clinical experience which will qualify him/her to proficiently select, perform and explain the psychomotor, bio-mechanics and analytical procedures used in this discipline. Emphasis is given to the consideration of the patient as a whole in which optimum oral health is attained and maintained. The Junior Year student will be expected to develop the knowledge, skills, and attitudes necessary to diagnose, prevent, and treat diseases of the hard tissue of teeth, restore of missing parts of individual teeth with intra-coronal and/or extra-coronal restorations and replace one or more teeth with fixed and/or removable appliances.

#### PRET 7376 - Geriatric Dentistry. Twelve (12) hours. Pre-requisites: First and Second Year Curriculum.

This course offers the student knowledge, skills and values required for the provision of oral health care to older adults; adults who are affected by physical, social, psychological and/or biological changes associated with aging, with or without concomitant disease. Depending upon the degree of impairment, older adults may be classified as functionally independent, frail, or functionally dependent. The course is conducted through lectures, discussion and case presentations.

### PRET 7378 — Oral Radiology Clinical Rotation. Thirty nine (39) hours. Pre-requisites: Approval of First and Second Year Curriculum.

This course is designed to provide the student with enough patient experience for the development of clinical competence in the field of Oral Radiology. The clinical experience will substantiate the background of theoretical Oral Radiology especially in the identification of normal and abnormal structures.

### PRET 7386 – Oral Surgery Clinical Rotation. Forty nine (49) hours. Pre-requisites: First and Second Year Curriculum.

This course is designed to provide the students with enough patient experience for the development of clinical competence in the field of Oral Surgery. The clinical experience will substantiate the background of theoretical Oral Surgery especially in the treatment of simple and complicated extractions and Pre-Prosthetic Surgery.

# PRET 7387 – Third Year Comprehensive Care Clinic. Seven hundred and fifteen (715) hours. Prerequisites: Dental Medicine School First and Second Year courses and approval of Part I of the National Board Dental Exam.

The Third Year Comprehensive Care Clinic course is designed to provide dental students the experience of comprehensive patient care, in order to develop clinical skills for the prevention, diagnosis and treatment of oral diseases, as well as, the ethical and professional competencies for the practice of general dentistry. This is a clinical practice course under close faculty supervision.

# PRET 7388 — Removable Prosthodontics Clinical Rotation. Ninety (90) hours. Pre-requisites: First and Second Year Curriculum.

This clinical course is designed to provide the Junior dental students the opportunity to develop proficiency in their analytic and psychomotor skills in the treatment of patients needing removable complete and partial dentures. Students are encouraged to integrate the theory and practice learned in the pre-clinical years with this clinical experience. The importance of holistic approach to treatment, in which optimum oral health is attained and maintained, is emphasized. The patients are selected from a general pool generated by the screening of the diagnostic section and accepted by the Removable Prosthodontics Section. This clinic works in close relations with other clinic, when necessary, to assure that all aspects of patient treatment are considered.

### PRET 7396 — Oral Diagnosis Clinical Rotation. Sixty nine (69) hours. Pre-requisites: Approval of First and Second Year Curriculum.

This course is designed to provide the students with enough patient experience for the development of clinical competence in the field of Oral Diagnosis and the development of a treatment plan. The student will examine, gather, record, and evaluate information that contributes to the identification of abnormalities of the head and neck region that relates to the total health of the patient. The purpose of this information is to establish a diagnosis to formulate a rationale treatment plan.

### PRET 7398 - Dental Assistant Utilization Program. Thirty six (36) hours. Pre-requisites: DESP 7127.

This course is designed to develop the necessary skills to work effectively with a chairside dental assistant utilizing the principles and operations of Dental Auxiliary Utilization (DAU); sit-down four-handed dentistry, ergonomic principles, instrument transfer techniques, tray delivery system for specific dental treatment procedures, and interpersonal relations with the dental team.

# PRET 7400 – Comprehensive Care Clinic. One thousand (1,000) hours. Pre-requisites: Third Year clinical rotations, approved the First Part of the National Board Dental Examination.

The Fourth Year Comprehensive Care Clinic is designed to provide the senior dental student the experience of comprehensive care treatment. In this course, the student will apply and integrate the knowledge and skills acquired during the previous three (3) years of studies, under faculty supervision.

# PRET 7405 — Oral Health Promotion in a Special Community. Thirty six (36) hours. Pre-requisites: Approved First, Second, and Third Year.

This is an elective course designed for dental students to provide clinical education in a disadvantaged community. Its purpose is to sensitize students towards the community's sociocultural characteristics. Students are expected to develop skills to understand the community and its priorities towards oral health, design and implement a preventive clinical—education program in the selected community, and report the results of the intervention. Educational activities include visits to the community, videos, meetings with community leaders, and with members of the Oral Health Division of the Department of Health.

### PRET 7406 – Restoration of Endodontically Treated Teeth. Twenty four (24) hours. Pre—requisites: Third Year Curriculum.

This course consists of a series of lectures involving all the present techniques for restoration of endodontically treated teeth. All of these techniques will be practiced in the laboratory, on extracted teeth. Students will also practice these techniques in some patients under the supervision of a faculty member.

# PRET 7407 — Dental Photography. Twenty four (24) hours. Pre-requisites: Third Year curriculum approved.

This course introduces the student to the use of dental imaging and photography in several areas such as: treatment planning, record keeping, continuing education, staff education, dental insurance and others. The course covers topics related to the combination of digital technology and photography and the use of digital images for patient education. This course will be delivered through twenty four (24) hours of lectures, demonstrations and clinical practice.

# PRET 7408 – Effective Tobacco Control Interventions for Patients in the Dental Office. Twenty four (24) hours. Pre-requisites: Approved Third Year of the curriculum.

This course provides the student the basic knowledge necessary for including brief tobacco control interventions for patients in their dental practice. The students have the opportunity of visiting a Smoking Cessation Clinic during the evaluation of patients. The purpose of this visit is to show them the diagnostic approach with these patients. This course will be conducted with the use of conferences, clinical visits, and student presentations.

### PRET 7409 - Sports Dentistry. Twenty four (24) hours. Pre-requisites: Approved Third Year curriculum.

This is an elective course for senior students which includes demonstrations and laboratory exercises as well as lectures from invited faculty and students. All contemporary concepts in managing oral health in sports, including prevention and treatment of sport related injuries and recommended treatment in common and/or advanced athletes are considered.

# PRET 7410 — Clinical Experiences in Dental Treatment. Forty to eighty (40–80) hours. Pre-requisites: Third Year approved.

This course will provide the student the opportunity to provide dental care, under the supervision of a senior dental professional, in a hospital or health center environment. Emphasis will be placed on providing dental care to medically compromised patients. Students will have the opportunity to attend medical rounds, dental case presentations, clinical seminars, and lectures.

# PRET 7415 – Nitrous Oxide Inhalation Sedation in Dentistry. Forty eight (48) hours. Pre-requisites: Third Year curriculum approved.

The course is designed to teach the student the use of N2O inhalation sedation for control of pain and apprehension in General Dentistry Practice. The instructional strategies to be used are: lecture, group discussions, clinical demonstration and supervised clinical practice.

**PRET 7416 – Use of Microscope in Dentistry. Seventeen (17) hours. Pre-requisites: Third Year Curriculum.** This course is designed to develop knowledge and skills in the use of the dental clinical microscope in the different disciplines of Dentistry. The student will also have the opportunity to do clinical procedures utilizing the microscope.

### PRET 7419 — The Dentist in the Hospital Environment. Thirty six (36) hours. Pre-requisites: Third Year curriculum approved.

This course is designed for senior dental students to develop knowledge and skills to comprehend hospital organization, protocol procedures and professional requirements in order to participate as a member of the health team, and provide optimal patient care.

#### PRET 7425 - Maxillofacial Prosthetics and Dental Oncology. Twelve (12) hours.

The course will introduce the student to the subspecialty of dental oncology and maxillofacial prosthetics. The student will learn how cancer patients are treated prior, during and after cancer treatment in the areas of surgery, radiation therapy and chemotherapy with emphasis of a team approach with other professionals in the field of cancer treatment. In addition the student will be introduced to the role of prosthodontics in the rehabilitation of these patients. In this course discusses item about psychodynamic interactions, maxillectomy anatomy, principles of maxillofacial RPD, maxillary obturators, radiation therapy oral manifestations, oral complications, management, extraoral prosthesis, and special prosthesis.

# PRET 7426 - Review Basic Concepts and Laboratory in Removable, Fixed and Implant Prosthesis for International Students. Fifty four (54) hours. Pre-requisites: PRET 7300.

This course is designed for internationally—trained dentist admitted to the Advance Placement Program that have approved the National Boards Part I and II. The course consist of a series of lectures, seminars, demonstrations and laboratories exercises related to Fixed, Removable and Implant prosthodontics. The teaching material is presented in a sequential and integrated manner combining/relating it to laboratory and clinical procedures. Students are also required to independently study in order to expand their knowledge and correlate the laboratory and clinical environment. Grading System: Passed (P), Fail (F).

#### PRET 7427 - Craniomandibular Stabilization. Twenty seven (27) hours.

This elective course is designed to provide the dental students the opportunity to develop proficiency in their analytic and psychomotor skills in the treatment of patients needing dentognatic orofacial rehabilitation suffering temporomandibular disorders. In addition, the student will be introduced to the importance of a holistic and comprehensive approach to diagnose and treat patient temporomandibular disorders in order to attain and maintain optimum oral health.

### PRET 7428 - Dental Biomaterials Clinical Applications. Thirty (30) hours.

This is a Lecture—Seminar course dealing with the clinical aspects of dental biomaterials. Emphasis will be given to the clinical significance of material's properties and proper management of dental materials. This course will also involve the students in the search of recently published literature related to the course and promote the effective learning through discussion groups.

#### PRET 7429 – Advanced Operative and Esthetic Dentistry. Seventy two (72) hours.

This course, intended for 4th year dental students, is designed to develop knowledge, skill and understanding on advanced operative and esthetic dentistry. The student will also have the opportunity to perform a clinical procedure.