

**BOSTON UNIVERSITY INSTITUTE FOR DENTAL RESEARCH
AND EDUCATION DUBAI**



PEDIATRIC DENTISTRY

MANUAL

2008 - 2009

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Introduction

This manual reviews the BUIDRE postdoctoral program in Pediatric Dentistry and includes policies and procedures of the Pediatric Dentistry program. It has been prepared by the faculty and staff as a guide for the students at BUIDRE. It is supplemented by the general Student Policies and Procedures Manual distributed by the Office of the Chief Academic Officer at orientation.

The clinical program and requirements demand a high level of responsibility and self-discipline. Effective patient management will help you achieve your academic and clinical goals. Early familiarity with program requirements and clinical procedures will maximize your learning. Your patients rely on you for information, advice and expert treatment. Your ability to respond to your patients' needs accurately and confidently will depend on your complete familiarity with clinical procedures, program requirements and the patient record systems.

It is your responsibility to acquaint yourself thoroughly with the information in this Program Manual.

Mission Statement

The mission of Boston University School of Dental Medicine is to provide excellent education to dental professionals throughout their careers, to shape the future of dental medicine and dental education through research, to offer excellent health care services to the community, to participate in community activities, and to foster a respectful and supportive environment. The Boston University Institute for Dental Research and Education Dubai (BUIDRE) shares this mission.

The Boston University Institute for Dental Research and Education Dubai intends to assist Dubai Healthcare City in fulfilling its mission of becoming an “Integrated Center of Excellence in the region for specialist medical and clinical services, medical education and life science research.”

BUIDRE’s mission is to become:

- a high-quality, full service, prevention oriented dental care center,
- an academic center providing dental education programs comparable to Boston University’s postdoctoral dental education programs and providing science-based continuing dental education to professionals in the region, and
- a center for dental research and dental research training.

Organization of BUIDRE

Chief Academic Officer:	Dr. Thomas B. Kilgore
Dental Director:	Dr. Dina Debaybo
Department Chairperson:	Dr. Christopher V. Hughes
Program Director:	Dr. Wendy Cheney
Program Coordinator:	Dr. Dina Debaybo

Faculty:

Full time:

Thomas B. Kilgore, Chief Academic Officer; Associate Dean for Advanced Education and International Programs; Professor of Oral and Maxillofacial Surgery.

Nawaf AlDousari, Assistant Professor of Prosthodontics.

Maher Atassi, Assistant Clinical Professor of Prosthodontics.

Haneen Bokhadhoor, Assistant Professor of Periodontology.

Dina Debaybo, Associate Professor of Pediatric Dentistry.

Manal Halabi, Assistant Professor of Pediatric Dentistry.

Ralph Hawkins, Associate Professor of Endodontics.

Elif Keser, Assistant Professor of Orthodontics.

Visiting:

John Ictech Cassis, Director of Advanced Education in General Dentistry, Postgraduate Operative and Esthetic Programs, Clinical Professor of Restorative Sciences and Biomaterials.

Wendy Cheney, Program Director of Advanced Education in Pediatric Dentistry; Associate Clinical Professor of Pediatric Dentistry.

Serge Dibart, Clinical Director of Postdoctoral Periodontology; Professor of Periodontology and Oral Biology.

Victor S. Dietz, Program Director of Advanced Education in Orthodontics, Associate Clinical Professor of Orthodontics.

Anthony A. Gianelly, Chairman *ad interim*, Department of Orthodontics; Professor of Orthodontics.

Christopher V. Hughes, Chairman of the Department of Pediatric Dentistry, Associate Professor of Pediatric Dentistry.

Jeffrey W. Hutter, Dean Ad-Interim, Professor and Chairman of the Department of Endodontics, Program Director of Advanced Education in Endodontics.

Steven M. Morgano, Program Director of Advanced Education in Prosthodontics, Professor of Restorative Sciences and Biomaterials.

Dan Nathanson, Professor and Chairman, Department of Restorative Sciences and Biomaterials.

Frank G. Oppenheim, Professor and Chairman, Department of Periodontology and Oral Biology.

Ramzi Sarkis, Assistant Professor, Department of Endodontics, Director of Educational Planning for the Office of Advanced Education and International Programs.

Thomas E. Van Dyke, Program Director, Department of Periodontology and Oral Biology, Director Clinical Research Center, Professor of Periodontology and Oral Biology.

Pediatric Dentistry Goals and Objectives

Goal 1: To prepare a specialist who is proficient in providing both primary and comprehensive preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs, in institutional, private or public health settings.

- Objective 1:** To provide instruction in those biomedical sciences that are directly relevant to the practice of pediatric dentistry: biostatistics/clinical epidemiology, pharmacology, microbiology, embryology, genetics, anatomy and oral pathology.
- Objective 2:** To provide instruction in the principles of biomedical ethics, jurisprudence, risk management and informed consent.
- Objective 3:** To provide instruction in the prevention, recognition and management of medical emergencies in the dental setting.
- Objective 4:** To provide instruction and experience in pediatric patient management in the dental setting using non-pharmacologic and pharmacologic approaches consistent with approved guidelines, including conscious sedation and general anesthesia in the operating room.
- Objective 5:** To provide instruction and experience in pediatric oral and maxillofacial radiology including appropriate procedures of radiation hygiene.
- Objective 6:** To provide instruction and experience in the scientific basis, prevention and treatment of dental caries including utilization of comprehensive restorative and prosthetic techniques.
- Objective 7:** To provide instruction and experience in the diagnosis and either management or referral of pulpal and periodontal pathology in children, adolescents and those with special health care needs.
- Objective 8:** To provide instruction and experience in the assessment, diagnosis and management of orofacial pathology, dental pain, infection and orofacial trauma including the recognition of non-accidental trauma and neglect.
- Objective 9:** To provide instruction and experience in diagnosis and either management or referral of problems affecting orofacial esthetics, form or function, including abnormalities in dentofacial growth, development and occlusion, and the application of biomechanics to correct such abnormalities.

Objective 10: To provide instruction and experience in the design, implementation and management of a contemporary practice of pediatric dentistry, emphasizing business skills for proper and efficient practice.

Objective 11: To encourage the successful completion of the American Board of Pediatric Dentistry Certification Examinations if the program becomes accredited by the ADA Commission on Dental Accreditation.

Goal 2: To stimulate and encourage development of a critical and inquiring attitude that is necessary for the advancement of practice, research and teaching in pediatric dentistry.

Objective 12: To provide instruction and experience in the formulation of a scientific research protocol followed by its implementation.

Objective 13: To provide instruction and experience in the critical evaluation of the scientific literature related to pediatric dentistry.

Goal 3: To educate future pediatric dentists to work in coordination with members of other health care and social disciplines.

Objective 14: To provide instruction and experience in the assessment and management of patients with a broad range of medical, physical, psychosocial and/or social circumstances and the alternatives in the delivery of dental care that these conditions might require.

Objective 15: To provide experience in coordinating patient management with clinicians in other dental specialties and health care fields.

Goal 4: To emphasize rigorous scholarship and high academic standards.

Objective 16: To provide instruction that meets the professional needs and interests of the students.

Objective 17: To strengthen the process for integrating assessment and evaluation with action planning and improvement.

Pediatric Dentistry Program Description

Certificate of Advanced Graduate Study (CAGS)

BUIDRE has developed rigorous and challenging specialty programs in which students first establish a firm theoretical foundation through a group of well-designed courses and then assume responsibility for direct patient care with close supervision and feedback.

BUIDRE has a special commitment to outstanding patient care. One manifestation of this commitment is our excellent and experienced faculty who work intensively with students on a one-to-one basis.

The CAGS program is a three-year program integrated with the MSD program, in which students follow a course of classroom study and clinical patient care under faculty supervision leading to clinical proficiency in the field of pediatric Dentistry.

Master of Science in Dentistry (MSD)

Students who are admitted to a CAGS program will concomitantly pursue the Master of Science in Dentistry degree. The programs are combined clinical and research programs. Students will have three years of clinical experience and three years to develop a research proposal, collect data and write and defend their thesis. In any one year, students will spend approximately 1/3 of their time pursuing research and 2/3 of their time in clinical study and practice. On completion of the requirements, the MSD degree is awarded in the same area as the CAGS.

Candidates for the MSD degree are required to pass all assigned courses and demonstrate progress in their area of research throughout the three years of the program. The number of courses that may be transferred to an MSD program is explained in more detail in the Policy on Transfer of Courses, Course Exemptions, and Academic Performance in the BUIDRE Catalog. Candidates plan their courses in consultation with the major advisor and in accordance with the requirements of their major field. Coursework may be in formal courses, seminars, and research in proportion to the particular needs and backgrounds of the candidates as worked out in consultation with the major advisor. Requirements for the MSD include completing a major research project and thesis of professional caliber under faculty supervision. The goal is for students to develop the ability to focus, analyze, and organize complex data to address an issue in a way that contributes to the literature.

CAGS / MSD

The goal of the combined CAGS/MSD program is to prepare graduates for productive careers in both basic research and clinical dentistry. Consequently, the program requires a laboratory research thesis or field project. The degree/certificate program requires a minimum of three years of study and leads to both the Certificate of Advanced Graduate Studies in the dental specialty and the Master of Science in Dentistry degrees. The program may be longer than three years depending on specific department requirements. In the CAGS/MSD program, the specific course requirements of the Master of Science in Dentistry can be satisfied by the regular CAGS

curriculum. The remainder of courses required for the MSD degree can, therefore, be fulfilled through directed study and research credits.

Certificate of Advanced Graduate Study in Pediatric Dentistry and Master of Science in Pediatric Dentistry

The Pediatric Dentistry Program offers a 36-month curriculum leading to a CAGS / MSD in Pediatric Dentistry.

The primary goal of the CAGS / MSD in pediatric dentistry is to prepare dentists to become specialists who are proficient in providing both primary and comprehensive preventive and therapeutic oral health care to infants and children through adolescence, including children with special health care needs. In addition, the curriculum is designed to prepare students wishing to pursue a career in research or teaching in pediatric dentistry.

Proficiencies

Students are trained to provide services in institutional, private, or public health settings. The program encourages the development of a critical and inquiring attitude that is necessary for the advancement of practice, research and teaching in pediatric dentistry. The program educates future pediatric dentists to work in coordination with members of other health care and social disciplines.

A graduate of the CAGS / MSD Program in Pediatric Dentistry will be proficient in:

1. Working cooperatively with consultants and clinicians in other dental specialties and healthcare fields:
 - a. Recognizing when consultation with other clinician(s) is indicated and providing written referral(s) that include appropriate diagnostic material;
 - b. Participating in multidisciplinary care for patients with complex medical and/or dental needs;
2. Treating pediatric patients using non-pharmacological and pharmacological approaches consistent with approved guidelines for care:
 - a. Describing to parents in understandable terms various behavior management techniques;
 - b. Obtaining informed consent for the use of behavior management techniques including restraint and conscious sedation;
 - c. Performing a medical risk assessment;
 - d. Applying non-pharmacologic behavior management techniques effectively in an out-patient setting;
 - e. selecting appropriate drug(s) and dosages, including nitrous oxide and local anesthetic for individual patients undergoing conscious sedation;
 - f. Continuously monitoring and interpreting physiologic data during conscious sedation and prior to discharge;
 - g. Managing sedation-related and medical emergencies during simulations and drills;

3. Applying current scientific principles, techniques and treatment planning for the prevention of oral diseases:
 - a. Implementing dental health education programs, materials and personnel to assist in the delivery of preventive care;
4. Providing comprehensive restorative and prosthetic dental care for infants, children, adolescents and those with special health care needs:
 - a. Obtaining and interpreting a comprehensive dental and medical history;
 - b. Conducting a thorough and accurate clinical examination;
 - c. Obtaining and interpreting appropriate radiographic and other diagnostic material;
 - d. Interpreting findings from the history and clinical examination and formulating an appropriate treatment plan;
 - e. Discussing treatment plan options with parents and obtaining informed consent;
 - f. Safely and effectively administering local anesthetic to pediatric patients through adolescence and to those with special health care needs;
 - g. Providing consistently high quality restorative and prosthetic treatment;
5. Diagnosing and treating traumatic injuries of the oral and perioral structures:
 - a. Evaluating and treating trauma to the primary, mixed and permanent dentitions such as repositioning, replanting, stabilizing and restoring intruded, extruded, luxated and avulsed teeth to acceptable esthetic and functional status;
 - b. Evaluating, diagnosing and treating pulpal, periodontal and associated soft tissues following traumatic injury;
 - c. Recognizing orofacial injuries such as fractures of the maxilla and/or mandible and referring for treatment by an appropriate specialist;
 - d. Recognizing and reporting child abuse, neglect, and non-accidental trauma;
6. Diagnosing periodontal diseases in pediatric and adolescent patients, and either treating or referring the patient to the appropriate specialist;
7. Diagnosing and treating diseases of the pulpal and periradicular tissues in the primary and developing permanent dentition;
8. Managing the oral health of patients with special health care needs including those who are medically or physically compromised and those with developmental, psychiatric or psychological disorders:
 - a. Recognizing the significance of special health care needs in individual patients and implementing treatment plans that utilize the alternatives in the delivery of dental care that those conditions may require;
9. Diagnosing abnormalities in the developing dentition and treating those conditions which can be corrected or significantly improved by the early utilization of limited appliances;
10. Providing dental care in the operating room to patients while under general anesthesia:
 - a. Performing pre-operative workup and assessment including medical risk assessment related to general anesthesia;
 - b. Completing admitting procedures, operative consent, medical records, operative dictation and discharge orders;
 - c. Providing consistently high quality restorative procedures in the operating room;
 - d. Performing post-operative follow-up and implementing preventive plans;
11. Evaluating and managing dental issues in pediatric patients admitted to hospital:
 - a. Ordering and performing consultations in an in-patient setting;

- b. Obtaining and evaluating patient/family history, ordering radiographic and laboratory tests;
 - c. Writing patient management orders and completing medical records;
12. Assessing and managing orofacial trauma, dental pain and infections while on emergency services.

Academic Requirements

Students must successfully complete all required courses as outlined in this Pediatric Dentistry Program Manual and must achieve all proficiencies. Failure to do so in any course will result in the student failing to earn his/her academic degree/certificate. Each postdoctoral program has a fixed curriculum and graduation is dependant on passing all courses in the curriculum, demonstrating clinical proficiency in the discipline, completing a research project, and writing and defending a thesis.

Seminars

During the course of study, each student will be responsible for preparing a variety of seminars. Each seminar will be assigned to students who will review the literature and prepare reading lists. Following the seminar, the student who acts as moderator will be responsible to see that each section is typed, assembled and turned in to the Program Coordinator.

Clinical Rotations

Students will participate in clinical rotations in pediatric dentistry, oral surgery, anesthesia, and pediatric orthodontics. Students are scheduled in the clinic five days a week (Sunday – Thursday) for a total of 40 hours. Classes are held either before clinic from 8 am-9 am or after clinic from 5:30 pm-7 pm.

Only those cases which have been properly typed, cost estimated, contracted, paid, and treated to the advisor's satisfaction will be accepted as completed clinical procedures.

Case Presentations

At selected times during the academic year students will be required to present case reports and patient records to his/her faculty advisor. These sessions will be utilized to assess student progress, identify any problems or shortcomings, and institute remedial measures.

Research

Students who are admitted to a Certificate of Advanced Graduate Studies (CAGS) will concomitantly pursue the Master of Science in Dentistry (MSD). The programs are combined clinical and research programs. Students will have three years of clinical experience and three years to develop a research proposal, collect data and write and defend their thesis. In any one year, students will spend approximately 1/3 of their time pursuing research and 2/3 of their time in clinical study and practice. On completion of the requirements, the MSD degree is awarded either in the same area as the CAGS or Dental Public Health. The MSD is not offered with the Advanced Education in General Dentistry program.

Candidates for the MSD degree are required to pass all assigned courses and demonstrate progress in their area of research throughout the three years of the program. The number of courses that may be transferred to an MSD program is explained in more detail in the Policy on

Transfer of Courses and Course Exemption in the BUIDRE Policies and Procedures Manual. Core courses that will be required of all students doing research are in epidemiology, biostatistics, and research writing. Additionally courses are planned by candidates in consultation with the research advisor and in accordance with the requirements of their major field. Coursework may be in formal courses, seminars, and research in proportion to the particular needs and backgrounds of the candidates as worked out in consultation with the research advisor. Requirements for the MSD include completing the core courses and a major research project and thesis of professional caliber under faculty supervision. The goal is for students to develop the ability to evaluate the existing literature, focus, organize and analyze complex data to address an issue in a way that contributes to the literature.

The MSD degree entails a research project and thesis and is an integral component of the 36-month program. Depending on the time needed to complete the research component, additional time beyond the 36 months may be necessary for successful completion of the MSD degree. Other coursework may be assigned at the discretion of the research advisor.

Thesis

A research thesis is required. Guidelines for thesis preparation will be provided to candidates by their program coordinator. The thesis is to be based on a research project carried out by the candidate. The topic for a thesis will be chosen by the candidate in conjunction with the faculty advisor. The major areas of focus are clinical, epidemiological or public health research. In certain cases, field projects or systematic reviews with a meta-analyses of the literature may be acceptable.

Students must initiate and complete a research project using the elements of scientific method, including research design, accurate reporting, critical thinking and the formulation of conclusions based upon scientific data rather than opinion. Collaboration with other hospitals, medical institutions and other health-orientated organizations is encouraged to foster collaborative research.

Students will be assigned a research advisor within the CAGS Program with the approval of the appropriate clinical research or dental public health directors at Boston University. The student must work closely with the research advisor to ensure satisfactory progress. The research protocol will be developed within the first 6 months of the program. Implementation and data collection will commence after Institutional Review Board approval (research ethics committee) approval (where appropriate) and other regulatory approvals. It is anticipated that data collection will be complete no later than 4 months before graduation to allow for data analysis, thesis preparation and defense of the thesis (optional depending on the program). Guidelines for Thesis Dissertation Submission are provided in the Student Handbook, Appendix IV.

Pediatric Dentistry Curriculum

A word on Distance Education

Most classes and all clinical and research activity will take place at the BUIDRE facilities in Dubai. Some coursework will be presented electronically from Boston University School of Dental Medicine. Courses presented via distance education technology are indicated in the following course listings. In most cases these courses are intended to be viewed in a classroom setting with BUIDRE faculty present to stimulate discussion and answer questions. However, these courses will also be available on the internet for student's independent review.

Please note that there is no required number of credits to graduate. Completing all coursework is required for graduation. Credits are assigned only for weighting courses for calculation of grade point average.

Interdisciplinary (IDC) courses are indicated below. IDC course descriptions can be found on page 17 of this manual.

Year I

OB 761 Oral Microbiology 1 cr, 2nd sem. **(IDC, Distance Education from BU)**
OB 767 Oral Immunology 1 cr, 2nd sem. **(IDC, Distance Education from BU)**
OB 830 Research Writing 1 cr, 1st sem. **(IDC, Distance Education from BU)**
OS 828 Pain and Anxiety Control 1 cr, 2nd sem. **(IDC)**
OS 831 Head and Neck Anatomy 1cr, 1st sem. **(IDC, Distance Education from BU)**
PA 801 Oral and Maxillofacial Pathology 1 cr, 2nd sem. **(IDC, Distance Education from BU)**
PD 802 Fundamentals of Pediatric Dentistry 2 cr, 1st sem.
PD 821 Advanced Seminar in Pediatric Dentistry 2 cr, 1st and 2nd sem.
PD 832 Growth and Development .5 cr, 1st sem. **(IDC)**
PD 911 Clinical Pediatric Dentistry 10 cr, 1st and 2nd sem.
PD 918 Clinical Anesthesia 1 cr, 2nd sem.
PD 922 Clinical Oral Surgery 1 cr, 1st sem.
PD 991 Research Pediatric Dentistry 6 cr, 1st and 2nd sem.
PE 827 Applied Dental Pharmacology 1 cr, 2nd sem. **(IDC, Distance Education from BU)**
PH 741 Behavioral Sciences 1 cr, 1st sem. **(IDC, Distance Education from BU)**
PH 763 Bioethics and the Law 1 cr, 1st sem. **(IDC, Distance Education from BU)**
PH 803 Biostatistics 1 cr, 1st and 2nd sem. **(IDC, Distance Education from BU)**

Year II

PD 808 Orthodontics for Pediatric Dentists 1 cr, 3rd sem.
PD 822 Advanced Seminar in Pediatric Dentistry 2 cr, 3rd and 4th sem.
PD 912 Clinical Pediatric Dentistry 10 cr, 3rd and 4th sem.
PD 916 Clinical Orthodontics 4 cr, 3rd and 4th sem.
PD 920 Clinical Pediatric Medicine 2 cr, 3rd or 4th sem.
PD 992 Research Pediatric Dentistry 6 cr, 3rd and 4th sem.
PE 764 Current Concepts in Periodontology 1 cr, 3rd sem. **(IDC)**
PE 830 Clinical Applications of Oral Medicine and Oral Pathology 1 cr, 4th sem. **(IDC)**
PH 831 Presentation Skills 1 cr, 4th sem. **(IDC, Distance Education from BU)**

Year III

PD 823 Advanced Seminar in Pediatric Dentistry 2 cr, 5th and 6th sem.

PD 824 Advanced Case Presentations in Pediatric Dentistry 2 cr, 5th and 6th sem.

PD 913 Clinical Pediatric Dentistry 12 cr, 5th and 6th sem.

PD 917 Clinical Orthodontics 4 cr, 5th and 6th sem.

PD 993 Research Pediatric Dentistry 8 cr, 5th and 6th sem.

Pediatric Dentistry Course Descriptions

PD 802 Fundamentals of Pediatric Dentistry

Intensive lecture series covering the fundamental concepts of the practice of pediatric dentistry. The course is intended to familiarize the new student with concepts that will be encountered in the various clinical settings. 2 cr, 1st sem.

PD 808 Orthodontics for Pediatric Dentists

Emphasis is placed on growth and development, cephalometrics, diagnosis and treatment planning and the evaluation of the normal and abnormal conditions in the primary, early mixed and late mixed dentitions. 1 cr, 3rd sem.

PD 821, 822, 823 Advanced Seminar in Pediatric Dentistry

A two-year, in-depth course of seminars that reviews the current literature related to Pediatric Dentistry. Students from both the second and third year read assigned articles and abstract them for presentation in the seminar. 2 cr, 1st and 2nd sem; 2 cr, 3rd and 4th sem; 2 cr, 5th and 6th sem.

PD 824 Advanced Case Presentations in Pediatric Dentistry

The purpose of the course is to introduce the student to the discipline of case workup, analysis, and presentation. During the third year of the program, three cases must be documented, analyzed and presented. In addition, three cases that represent the student's best work in various treatment categories must be documented and presented. 2 cr, 5th and 6th sem.

PD 911, 912, 913 Clinical Pediatric Dentistry

During the first year of the program, students are closely supervised while developing skills in diagnosis, radiographic technique, treatment planning, preventive and restorative dentistry, space management, trauma management, and nonpharmacologic behavior management. During the second year, students learn to manage children with complex special health care needs, including inpatients. Students interact and coordinate with other medical departments within the hospitals, and with outside clinics and practitioners. They utilize pharmacologic behavior management techniques for children, including those with special health care needs. 10 cr, 1st and 2nd sem; 10 cr, 3rd and 4th sem; 12 cr, 5th and 6th sem.

PD 916, 917 Clinical Orthodontics

Students develop clinical expertise through practical application of orthodontic principles developed in lectures and seminars. 4 cr, 3rd and 4th sem; 4 cr, 5th and 6th sem.

PD 918 Clinical Anesthesia

This course introduces the student to the basic principles of general anesthesia with particular emphasis on pre and postoperative evaluation of the surgical patient. The student participates in the administration of general anesthesia to dental and medical surgical cases. 1 cr, 2nd sem.

PD 920 Clinical Pediatric Medicine

The goal of this month-long rotation in clinical pediatrics is to expose the student to the practice of pediatric medicine. The specific objectives are to gain an understanding of: obtaining and evaluating complete medical histories, parental interviews, system orientated physical

examinations, clinical assessment of healthy and ill patients, selection of laboratory tests and evaluation of data, evaluation of physical, motor and sensory development, genetic implications of childhood diseases, the use of drug therapy in the management of diseases, and parental management through discussions and explanations. 2 cr, 3rd or 4th sem.

PD 922 Clinical Oral Surgery

The goal of the month-long rotation in clinical oral surgery is to offer sufficient clinical experience to enable the student to achieve competency in the assessment and management of orofacial trauma, infections, and dental pain. During the rotation each student participates in the emergency room at Rashid Hospital on an "on call" basis. 1 cr, 1st sem.

PD 991, 992, 993 Research in Pediatric Dentistry

The application of research methods and the evaluation of investigative data develop intellect, a creative attitude, improved interpretation of scientific literature and a desire for continued study. 6 cr, 1st and 2nd sem; 6 cr, 3rd and 4th sem; 8 cr, 5th and 6th sem.

Interdisciplinary Courses

OB 761 Oral Microbiology

Distribution, ecology and pathogenic potential of oral microbiota. Pathogenicity of components of bacterial plaque and their role on the development of oral diseases. Mechanisms of local and systemic resistance to pathogenic oral microbiota. 1 cr, Spring sem. **(IDC, Distance Education from BU)**

OB 767 Oral Immunology

Defense mechanisms that the host utilizes against exogenous matter. Although the immune system is protective, there is also a destructive aspect that affects most tissue. The course examines these seemingly divergent mechanisms. 1 cr, Spring sem. **(IDC, Distance Education from BU)**

OB 830 Research Writing

Identifies and defines the components and uses of a research protocol, the underlying research methodology and data, and the construction of a prudent work schedule essential to complete a research project. Includes the development of a protocol based on the student's thesis topic. 1 cr, Fall sem. **(IDC, Distance Education from BU)**

OS 828 Pain and Anxiety Control

A discussion of topics in pain and anxiety control, including pain physiology, local anesthetic techniques, patient management, and sedative techniques. 1 cr, Spring sem. **(IDC)**

OS 831 Head and Neck Anatomy

An in-depth discussion of head and neck anatomy, emphasizing implications of head and neck anatomy to clinical dentistry. 1 cr, Fall sem. **(IDC, Distance Education from BU)**

PA 801 Oral and Maxillofacial Pathology

A course for post-doctoral students in the dental specialty programs covering a spectrum of diseases involving the oral and paraoral structures. Lectures will include fibro-osseous lesions, developmental disturbances affecting the jaws and teeth, odontogenic tumors, cysts of the oral and paraoral region, bacterial, viral and mycotic infections, benign tumors and tumor-like lesions, white lesions, pigmented lesions, vesicullo-bullous diseases, hematologic, endocrine, and metabolic disorders. 1 cr, Spring sem. **(IDC, Distance Education from BU)**

PD 832 Growth and Development

This course offers a clinically relevant understanding of craniofacial growth and development for the non-orthodontist. Topics include how malocclusion develops and how growth can be modified during treatment of malocclusion. Attention is focused on normal and abnormal growth and development of the face, the occlusion and the dental arches and includes cleft palate and other craniofacial disorders. .5 cr, Fall sem. **(IDC)**

PE 764 Current Concepts in Periodontology

Provides an overview of various clinical entities that the general dentist encounters daily. Emphasizes recognition and diagnosis of periodontal disease along with classification of periodontal conditions in different states of health and disease. The course also gives an overview of periodontal therapy, including surgical procedures for the generalist and non-periodontology specialist. 1 cr, Fall sem. **(IDC)**

PE 827 Applied Dental Pharmacology

In this course we will examine pharmacological issues relevant to dentistry and oral biology. We will focus on pharmacology associated with symptoms detected in the oral cavity during treatment. These include but are not limited to autoimmune syndrome, HIV, and cardiac, neurological, and metabolic disorders. Medications associated with these conditions and their influence on the oral cavity will be discussed. 1 cr, Spring sem. **(IDC, Distance Education from BU)**

PE 830 Clinical Applications of Oral Medicine and Oral Pathology

A systemic approach to the oral manifestations of systemic disease as well as a discussion of common oral lesions stressing therapeutics. 1 cr, Spring sem. **(IDC)**

PH 741 Behavioral Sciences

Focuses on developing a framework for delivering total health care. Examines the meaning and impact of effective communication skills, managing transitions, enhancing patient relations, and managing stress and pain. 1 cr, Fall sem. **(IDC, Distance Education from BU)**

PH 763 Bioethics and Law

Introduces models of applied ethics used within the field of dentistry. With lectures, case studies, and class discussion, students engage in identification and analysis of ethical dilemmas. Topics include professional responsibility and ethical principles, the doctor-patient relationship, the dentist and the community, and ethical conduct in science. 1 cr, Spring sem. **(IDC, Distance Education from BU)**

PH 803 Biostatistics

Introduces the concepts and techniques of biostatistics used in dental research and referred to in dental literature. Emphasizes the fundamentals of statistical logic and presents the basic principles of experimental design, statistical inference, and probability. Examples from current basic sciences research, survey research, and clinical trials augment the presentation of statistical theory. 1 cr, Fall and Spring sem. **(IDC, Distance Education from BU)**

PH 831 Presentation Skills

Develops and fine-tunes teaching and presentation abilities. Focuses on instructional design, presentation graphics and presentation skills. Hands on learning experience. 1 cr, Spring sem. **(IDC, Distance Education from BU)**

Seminars

A three-year, in-depth course of seminars that reviews the current literature related to Pediatric Dentistry. Students from the first, second and third year will read assigned articles and abstract them for presentation in the joint seminar.

Subjects include:

- Nonpharmacologic Behavior Management
- Orofacial Anomalies
- Local Anesthesia
- Periodontal Disease – Oral Pathology
- Dental and Eruption Anomalies
- Child Abuse
- Special Needs Patients
- Pharmacologic Behavior Management
- Infant/Anticipatory Guidance
- Traumatic Injuries
- Pulp Therapy
- Special Needs Patients
- Prevention: Nutrition, Caries, Fluoride, Sealants
- Radiology
- Restorative Dentistry
- Therapeutic – Pharmacology
- Oral Habits
- Practice Management
- Genetics
- Speech and Language
- Space Management
- Hospital Dentistry

Case Presentation

The student is required to demonstrate an advanced ability in case work-up, diagnosis, management and documentation of dental problems in infants, children, adolescents and patients with special health care needs as follows:

1. Case Presentations

During the first and second year of the program, three cases must be selected for presentation during the third year. An electronic copy of the presentation must be submitted along with the printed version for grading. The format for the case presentations should be closely adhered to the following outline:

PATIENT PROFILE:	Age, sex, residence.
TREATMENT SITE:	Primary Tx site.
CHIEF COMPLAINT:	In the patient's own words.
Hx OF PRESENT COMPLAINT:	Signs and symptoms.
MEDICAL HISTORY:	Comprehensive review.
DENTAL HISTORY:	Summary of past dental treatment.
SOCIAL AND FAMILY HISTORY:	Parents occupation, # of siblings, relevant medical history of family and relatives.
CLINICAL FINDINGS:	Extraoral, intraoral, habits, speech, behavior, radiographic, special diagnostic tests etc. Full records are required for orthodontic cases: photos, study models, X-rays, cephs, mixed dentition analysis, etc.
CONSULTATIONS:	Results of consultations with orthodontics, oral surgery, pediatrics, cardiology, etc.
DIAGNOSIS:	Concise summary of ALL findings DIFFERENTIAL DIAGNOSIS if indicated.
TREATMENT OPTIONS/PLAN:	Detailed list of treatment options including the plan that is selected and RATIONALE FOR SELECTED TREATMENT PLAN.
TREATMENT OBJECTIVES:	Specific end-results that are to be achieved as a result of proposed treatment.

TREATMENT ACCOMPLISHED: Summarize treatment to date including alterations made to original Tx Plan, complications, objectives not met, etc.

LITERATURE REVIEW: Comprehensive review of the CURRENT literature (last 5 years only) regarding the dental or medical problem. Review should be a detailed analysis of a very specific and limited topic, not an overview of a large subject area. If a medical condition is reviewed, include the implications regarding dental treatment specific to that condition.

2. Case Histories

Each student is required to complete one case from each of the following categories:

- b. Restorative
- c. Trauma
- d. Orthodontic

Grading

- a. 60% based on submission of an exact replica of the patient record for each case on the last Tuesday in May. The records should only include the treatment provided by the student and not include administrative/insurance forms
- b. 40% based on an oral presentation of each case to the Department of Pediatric Dentistry. A literature review is not required.

The clinical judgment and skills demonstrated in the cases selected must be of a standard expected of a proficient pediatric dentist. To achieve this end, the student must demonstrate:

- a. successful treatment results that are of high quality, and
- b. excellence in patient records documentation

Each case must demonstrate comprehensive care of the patient including periodic recall visits and preventive care.

1. Restorative Case

- a) Case Selection Criteria:
 - i. may be healthy or have special health care needs
 - ii. may or may not require behavior management (nitrous oxide relative analgesia, oral sedation or general anesthesia)
 - iii. full primary or mixed dentition
 - iv. extensive restorative needs in at least three quadrants
 - v. one or more interproximal lesions that need restoring

- vi. pulp therapy in at least one quadrant
- b) Documentation Requirements
 - vii. medical history, medical history re-evaluation
 - viii. consents: dental, recall, sedation, OR
 - ix. letters to and from referring dentists
 - x. dental exam and recall exam
 - xi. detailed progress notes
 - xii. pre and post treatment sedation instructions, sedation record
 - xiii. OR treatment record, dictation
 - xiv. pre-treatment radiographs including bitewings and periapicals of pulpally involved teeth and six month post treatment bitewings and periapicals of pulpally treated teeth
 - xv. pretreatment 7 series photographs: full face, profile, anterior teeth in occlusion, right and left posterior teeth in occlusion, maxillary arch, mandibular arch and post-treatment photographs: maxillary arch, mandibular arch

2. Trauma Case

- a) Case Selection Criteria
 - xvi. primary dentition
 - coronal fracture or luxation injury involving pulp therapy
 - xvii. permanent dentition
 - coronal fracture involving enamel and dentin
 - coronal fracture involving pulp therapy
 - complete avulsion with re-implantation
 - luxation injury requiring splinting
 - intrusion injury requiring treatment
 - root fracture
- b) Documentation Requirements
 - xviii. medical history, medical history re-evaluation
 - xix. consents: dental, recall
 - xx. letters to and from referring dentists
 - xxi. dental exam and recall exam
 - xxii. trauma form
 - xxiii. detailed progress notes
 - xxiv. pretreatment radiographs and post-treatment radiographs at appropriate intervals up to 12 months post-trauma
 - xxv. pretreatment photographs and appropriate photographic documentation of treatment method and outcome of treatment
 - xxvi. post-treatment vitality testing at appropriate intervals

3. Orthodontic Case

a) Case Selection Criteria

- xxvii. full primary or mixed dentition interceptive treatment
- xxviii. posterior crossbite
- xxix. anterior dental crossbite
- xxx. space regaining
- xxxi. ectopic eruption requiring minor tooth movement

b) Documentation Requirements

- i. medical history, medical history re-evaluation
- ii. consents: dental, orthodontic
- iii. letters to and from referring dentists
- iv. dental exam and recall exam
- v. mixed dentition analysis if indicated
- vi. progress notes including comprehensive diagnosis, detailed treatment and retention plan
- vii. appropriate pre and post treatment radiographs including periapicals of anterior teeth in crossbite
- viii. pre and post treatment 7 series photographs: full face, profile, anterior teeth in occlusion, right and left posterior teeth in occlusion, maxillary arch, mandibular arch
- ix. intraoral photographs of appliances including retention
- x. pre and post treatment study models (either laboratory made plaster-soaped models or “home-made” labeled stone models in correct occlusion with one inch bases)
- xi. cephalometric analysis if indicated

Research

The application of research methods and the evaluation of investigative data develop intellect, a creative attitude, improved interpretation of scientific literature and a desire for continued study.

Students must initiate and complete a research project using the elements of scientific method, including research design, accurate reporting, critical thinking and the formulation of conclusions based upon scientific data rather than opinion. Affiliation with hospitals, medical institutions and other health-orientated organizations is encouraged to foster collaborative research

Students should choose a faculty advisor within the Pediatric Dentistry Program (or with the approval of the Chief Academic Officer or an advisor from another program). The student must work closely with the research advisor to ensure satisfactory progress.

During the first semester, a research protocol is generated as a requirement of IDC course OB 830 Research Writing. The research advisor monitors project progress at regular intervals during the program. In May of the third year, the student must submit a written paper and give an oral presentation.

Presentations

Each student is required to give a 10-12 minute presentation/defense of his or her research project. Three additional minutes are allowed for questions.

The faculty research advisor grades the presentations according to the following criteria:

- a) Identification of problem, hypothesis, objectives
- b) Experimental design and use of adequate controls
- c) Precision and accuracy of methods, thoroughness of procedure
- d) Clarity and logic of results
- e) Logical interpretation of data and discussion related to other work in the field
- f) Significance of conclusions, scientific merit
- g) Overall quality of presentation, visual aid, handling of questions

Students are encouraged to submit their projects as either table clinics or short communications at local and regional dental meetings.

Abstract Preparation

At the completion of the project, each student must prepare an abstract. The abstract should contain a brief statement of:

- the objectives of the investigation
- the experimental methods employed
- the essential results including data and statistics
- the conclusions

Format for Research Protocol

TITLE:	This should be as concise and as accurate as possible.
TYPE OF RESEARCH PROJECT:	Undergraduate, graduate, faculty.
PRINCIPAL INVESTIGATOR:	Name, title and department affiliation of individual(s) conducting the study.
FACULTY ADVISOR:	Name, title and department affiliation of individual(s) participating in this capacity.
CONDUCTING AGENCY:	The institution administratively responsible for the project.
COOPERATING AGENCY:	Any institution or corporation providing outside support for the project through specimens, products, equipment, funding or consultation, laboratory or clinic space.
PERFORMANCE SITE:	Identify the physical location where the project will be performed.
PROPOSED PROJECT PERIOD:	The date of initiation to the anticipated date of completion of the project.

1.0 INTRODUCTION

1.1 Specific Aim

State concisely and realistically what the research is intended to accomplish and/or what hypothesis is to be tested

1.2 Significance

Briefly sketch the background to the present proposal, critically evaluate existing knowledge and specifically identify the gaps which the project is intended to fill. State concisely the importance of the research described in the proposal by relating the specific aims of long term objectives.

2.0 RESEARCH PLAN

Discuss in detail the experimental design and the procedures to be used to accomplish the specific aims of the project. Although no page limitation is specified for this part of the proposal, be succinct. The following components should be included when applicable:

2.1 The population to be studied including the size and criteria for selection

2.2 Establishment of controls or control groups and method(s) of group assignment

2.3 Sequence of investigation

- 2.4 Identification of the roles of the investigators and support personnel
- 2.5 Methodology involved describing in detail any new methodology and its advantages over existing methodologies
- 2.6 Potential difficulties and limitations of the proposed methodology and alternative approaches to achieve the aims of the project
- 2.7 Data collection methodology including copies of any forms intended for that purpose

3.0 EVALUATION

Discuss in detail the procedure that will be used to analyze and interpret the data generated in the project. The following components should be included where applicable:

- 3.1 Summary data forms, including a copy with simulated type of data
- 3.2 Determination of validity (accuracy) of data, including inter and intra-examiner errors
- 3.3 Statistical analyses to be performed including a copy of a simulated data analysis if possible
- 3.4 Determination of significance (how you interpret the results of the study depending upon the possible range of difference between the groups)

4.0 LITERATURE CITED

A listing of all the references cited in the introduction and research plan. Each citation should include the names of the authors, name of book or journal, volume #, page #'s and year of publication

5.0 APPENDIX

The following components should be included when applicable:

- 5.1 Clearance from the Institutional Review Board
- 5.2 Special and pertinent correspondence with cooperating and collaborating agencies

6.0 BUDGET

This section should contain an itemized cost of all anticipated supplier, personnel and equipment. The following items should be listed in this section:

- 6.1 Personnel
- 6.2 Operating services such as copying and printing
- 6.3 Supplies
- 6.4 Equipment

Dental Records

Dental records are legal documents and so a great deal of care must be taken to keep accurate, thorough and legible notes.

The U.S. Joint Commission on Hospital Accreditation formulates National Patient Safety Goals that must be adhered to. The complete reference can be found at:

http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/07_amb_obs_npsgs.htm

- Goal 1 Improve the accuracy of patient identification.
 - 1A Use at least two patient identifiers when providing care, treatment or services.
- Goal 2 Improve the effectiveness of communication among caregivers.
 - 2A For verbal or telephone orders or for telephonic reporting of critical test results, verify the complete order or test result by having the person receiving the information record and "read-back" the complete order or test result.
 - 2B Standardize a list of abbreviations, acronyms, symbols, and dose designations that are to be used throughout the organization.
 - 2C Measure and assess, and if appropriate, take action to improve the timeliness of reporting, and the timeliness of receipt by the responsible licensed caregiver, of critical test results and values.
 - 2E Implement a standardized approach to "hand off" communications, including an opportunity to ask and respond to questions.
- Goal 3 Improve the safety of using medications.
 - Standardize and limit the number of drug concentrations used by the organization
 - 3C Identify and, at a minimum, annually review a list of look-alike/sound-alike drugs used by the organization, and take action to prevent errors involving the interchange of these drugs.
 - 3D Label all medications, medication containers
- Goal 7 Reduce the risk of health care-associated infections.
 - 7A Comply with current World Health Organization (WHO) Hand Hygiene Guidelines or Centers for Disease Control and Prevention (CDC) hand hygiene guidelines.
 - 7B Manage as sentinel events all identified cases of unanticipated death or major permanent loss of function associated with a health care-associated infection.
- Goal 8 Accurately and completely reconcile medications across the continuum of care.
 - 8A There is a process for comparing the patient's current medications with those ordered for the patient while under the care of the organization.
 - 8B A complete list of the patient's medications is communicated to the next

provider of service when a patient is referred or transferred to another setting, service, practitioner or level of care within or outside the organization. The complete list of medications is also provided to the patient on discharge from the facility.

Goal 11 Reduce the risk of surgical fires.

11A Educate staff, including operating licensed independent practitioners and anesthesia providers, on how to control heat sources and manage fuels with enough time for patient preparation, and establish guidelines to minimize oxygen concentration under drapes.

Goal 13 Encourage patients' active involvement in their own care as a patient safety strategy.

13A Define and communicate the means for patients and their families to report concerns about safety and encourage them to do so.

General Points

- Entries should be made as soon as possible after the encounter with the patient
- All entries must be dated and the time recorded
- All interactions with the patient/parent must be recorded – including telephone conversations. If an incident is not recorded in the record, legally IT DIDN'T HAPPEN
- Errors should be crossed out with a single horizontal line and initialed.

Medical History

No form can ever extract every item of a person's medical history, therefore the form should be used only as a guide for further questions.

- Every patient must have a completed medical history form in their record
- All the questions must be answered by a legally eligible person who is knowledgeable about the patient's medical history
- Important medical issues should be circled in red e.g. SBE prophylaxis, uncontrolled seizures, hemophilia, drug allergy

Medical History Re-evaluation

The medical history should be reviewed at every visit – any changes must be documented. The form must be filled out at EVERY recall visit or every 6 months, whichever comes first.

Pain History

Presence OR absence of pain must be documented at every visit. If pain is present, it must be quantified and described, then addressed at that encounter. Changes in pain must be documented.

Dental Examination

- All sections on both pages must be completed whether the clinical findings are within normal limits or not.
- All abnormal findings must be described in detail and transferred to the Progress Notes
- The charting must be recorded according to the “Instructions for Charting” sheet that follows
- A summary of the radiographic findings must be recorded
- The Operative Treatment List should include tooth number(s) and the proposed treatment
- The Treatment Plan must contain details chronological sequence of proposed treatment by quadrant
- The treatment plan must be signed by the student and approved by the attending faculty member – thus ALL NEW PATIENTS MUST BE EXAMINED BY THE FACULTY.
- No patients are to be treated without approved treatment plans

Dental Recall Examination

This form must be completed at every recall or every 6 months – whichever comes first. No students are to treat patients with treatment plans that are more than 6 months old.

Trauma Form

This form must be completed for all patients who have experienced a traumatic injury to the orofacial area even if some time has elapsed since the injury.

Progress Notes

The following format **MUST** be used for progress note entries:

Dx

- age and sex
- medical diagnosis and history
- who presents with patient
- dental history
- presenting complaint (even if there isn't one)
- history of presenting complaint

Tx

- examination findings – all finding from the dental examination form that depart from normal must be detailed
 - extraoral findings
 - intraoral findings
 - radiographic findings (include number and type of films exposed)
 - oral hygiene assessment
 - caries risk analysis
- treatment plan

- for orthodontic cases, summarize objectives and timetable of treatment
- preventive program
- local anesthetic dose and route of administration (left mandibular block and long buccal)
- tooth number and surface
- all materials used
- note whether pulp treatment is vital versus non-vital and prognosis

Bx

- describe behavior or use accepted behavior rating scale
- detail behavior management techniques used and their result

Rx

- suggestions for treatment to be accomplished at the next visit
- referrals and consultations ordered

Consent Forms

1. Consent for Dental Treatment
To be used for all new patients and returning patients that require extensive further treatment.
2. Dental Recall Consent
To be used for patients who require treatment identified at the recall examination.
3. Consent for Orthodontic Treatment
To be used for ALL orthodontic procedures (not space maintenance procedures).
4. Consent for the Use of Sedation for Dental Treatment
To be used for all patients who will have pharmacologic agents administered for behavior management (exception is nitrous oxide alone).
5. Consent for Operation
To be used for patients scheduled for general anesthesia in the operating room.

Prescription Writing

Before prescribing any drug, the student must have a thorough understanding of the indications, contraindications, actions, administration and dosage recommendations of that particular drug. This information is available at: www.crlonline.com. (Login: budental; Password: goldman_1)

All prescriptions must be reviewed by a faculty member before being issued to the patient. The carbon copy must be taped to the Progress Notes.

The only exception is when it is necessary to prescribe a drug(s) for a patient who presents as an emergency out of clinic hours. In this situation, the proposed prescription should be discussed with the faculty member on-call, over the phone.

Elements of a Prescription:

- Superscription
Rx: means “recipo” which means “to take”
- Inscription
Name of drug: (brand name or generic) and dosage of an individual unit of the drug
- Subscription
DISP: Dispensing instructions to the pharmacist (form of drug and number of units)
- Signature
SIG: Instructions to the patient (amount, route, time and frequency)
- **Refill _____ Times**
If left blank, no refills can be given. Write a zero with a line through it to prevent someone else filling this in
- **Label Prescription**
If checked, the pharmacist must label the bottle/package with the drug name and dose. This is recommended in order to be able to identify the drug
- **Signature**
Sign FULL name and then print

Evaluation of Students

The Department of Pediatric Dentistry faculty closely monitors the progress of each student on a daily basis. At the end of each quarterly session, each student receives a formal comprehensive evaluation.

Evaluation Schedule

	First Year	Second Year	Third Year
September	Clinical Pediatric Dentistry Fundamentals of Pediatric Dentistry	Clinical Pediatric Dentistry	Clinical Pediatric Dentistry
December	Clinical Pediatric Dentistry	Clinical Pediatric Dentistry	Clinical Pediatric Dentistry
March	Clinical Pediatric Dentistry	Clinical Pediatric Dentistry	Clinical Pediatric Dentistry
June	Clinical Pediatric Dentistry Clinical Anesthesia Clinical Oral Surgery Research in Pediatric Dentistry	Clinical Pediatric Dentistry Clinical Orthodontics Clinical Pediatric Medicine Research in Pediatric Dentistry Advanced Seminar in Pediatric Dentistry Orthodontics for Pediatric Dentists	Clinical Pediatric Dentistry Advanced Seminar in Pediatric Dentistry Clinical Orthodontics Research in Pediatric Dentistry Advanced Case Presentations in Pediatric Dentistry

Faculty Assessment of Case Presentations

Student Name _____ *Faculty Name* _____ *Presentation Title* _____ *Date* _____

Communication Skills

	Very much so	For the most part	Only slightly	Not at all	
1. Speaks clearly	4	3	2	1	_____
2. Speaks at the right pace	4	3	2	1	_____
3. Speaks to the audience (not reading directly from notes)	4	3	2	1	_____
4. Makes ongoing eye contact with the audience	4	3	2	1	_____
5. Appears confident	4	3	2	1	_____
6. Appears enthusiastic	4	3	2	1	_____
7. Open to constructive criticism	4	3	2	1	_____

Presentation of Case Record

	Outstanding	Good	Fair	Poor	
8. Patient profile	4	3	2	1	_____
9. Selection of radiographs	10	8	6	4	_____
10. Interpretation of radiographs	10	8	6	4	_____
11. Assessment of behavior	4	3	2	1	_____
12. Clinical evaluation	10	8	6	4	_____
13. Diagnosis	10	8	6	4	_____
14. Treatment rationale	10	8	6	4	_____
15. Treatment plan with alternate options	10	8	6	4	_____
16. Clinical Photos	4	3	2	1	_____

17. Cephalometric analysis: _____

18. Study models, if indicated: _____

19. Arch length analysis, if indicated: _____

20. Consultations, if indicated: _____

Discussion of Literature Review

Medical problem with dental implications OR dental problem with management implications.

	Outstanding	Good	Fair	Poor	
21. General organization	4	3	2	1	_____
22. Thoroughness	4	3	2	1	_____
23. Dental implications of medical condition or Dental management options	4	3	2	1	_____
24. Current scholarship and/or Seminal, classic scholarship	4	3	2	1	_____
25. Footnotes in the paper	4	3	2	1	_____

Overall Comments and Recommendations

26. What were the major strengths of the oral presentation?

27. What were the major strengths of the written presentation?

28. What changes could be made to strengthen next written and oral presentation?

29. How does this case presentation rank with others presented in this program?

- Top 1/3 Middle 1/3 Bottom 1/3

30. Final Grade

- A (≥ 104 pts) B (92 - 103 pts) C (79 - 91 pts) D (≤ 78 pts)

Evaluation of Anesthesia Rotation

Student Name _____ Rotation _____

Date _____ Reviewer _____

1. Professional Attributes

	More Than Adequate	Adequate	Less Than Adequate	Does Not Meet Requirements
a. Arrives promptly with professional attitude	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Intravenous access skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Recognition of airway difficulties	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Intervention and management of airway	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Intubation skills	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Knowledge and Problem Solving Ability

	More Than Adequate	Adequate	Less Than Adequate	Does Not Meet Requirements
a. Demonstrates level of knowledge appropriate for academic level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Understanding of respiratory and cardiovascular physiology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Understanding of anesthetic, sedative and local anesthetic pharmacology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Achievement during course rotation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Additional Comments

4. Final Grade

- A Exceeds expected level of performance considering level of training.
- B Meets expected level of performance considering level of training.
- C Below expected level of performance considering level of training.
- D Does not meet expected level of performance considering level of training.
- Inc Clinical rotation was not completed.

Evaluation of Student Oral Surgery Rotation

Student Name _____ Rotation _____

Date _____ Reviewer _____

Professional Attributes

	More Than Adequate	Adequate	Less Than Adequate	Does Not Meet Requirements
a. Assumes appropriate responsibility for patient care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Reliably and effectively contributes to the health care team	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Exhibits professional behavior appropriate to level of training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Assesses and address own learning needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Establishes trust and communicates well with patients and families	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Knowledge and Problem Solving Ability

	More Than Adequate	Adequate	Less Than Adequate	Does Not Meet Requirements
a. Demonstrates level of knowledge appropriate for academic level	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Analyzes clinical problems and identifies relevant issues	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Develops differential diagnosis and evaluation plans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Demonstrates independent learning from the literature	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional Comments

Final Grade

- A Exceeds expected level of performance considering level of training.
- B Meets expected level of performance considering level of training.
- C Below expected level of performance considering level of training.
- D Does not meet expected level of performance considering level of training.
- Inc Clinical rotation was not completed

2. As you conclude your first year in the program, how satisfied are you with each of the following parts of the program? Check (✓) one response for each item and use the line to briefly explain your answer and to specifically note names and site locations, if desired.

	Very Much Satisfied	For the Most Part Satisfied	Somewhat Satisfied	Only Slightly Satisfied	Not at all Satisfied
a. Didactic core courses in Pediatric Dentistry. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Clinical courses in Pediatric Dentistry. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Biomedical science courses. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Faculty feedback during daily clinical instruction. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Faculty written evaluation of students. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Atmosphere of the learning environment. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Management of the program. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Management of rotations. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Patient pool. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Equipment and supplies. <i>Explain:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. What things have interfered or limited your learning experience in your first year, if any?
(Please print.)

4. What things have enhanced or greatly facilitated your learning experience in your first year?
(Please print.)

5. How satisfied are you with your choice of being a pediatric dentist? (Check one.)

- Very Satisfied
 Satisfied
 Somewhat Satisfied
 Dissatisfied
 Very Dissatisfied

6. Given your first year in the program, how well is the program preparing you in each of the following areas? (Check one for each.)

	Very Well	More Than Adequately	Adequately	Less Than Adequately	Very Poorly
a. Understanding the relevance of biomedical sciences directly relevant to the practice of pediatric dentistry.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. The assessment of physical, psychological, and social development of children and adolescents.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Preventive and anticipatory guidance principles and practices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Pediatric oral and maxillofacial radiology including appropriate procedures of radiation hygiene.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Comprehensive restorative and prosthetic dentistry for children and adolescents including management of periodontal and pulpal pathology.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Treatment of a broad range of medical conditions and the alternatives in the delivery of dental care that these conditions might require.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Behavioral management techniques including pharmacologic conscious sedation consistent with approved guidelines and general anesthesia in the operating room.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. The assessment, diagnosis, and management of orofacial pathology, dental pain, infection and orofacial trauma including recognition of non-accidental trauma.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. The prevention and management of medical emergencies in the dental setting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. The diagnosis of problems affecting orofacial esthetics, form or function, including abnormalities in dentofacial growth and occlusion and the application of biomechanics to correct such abnormalities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Coordinating patient management with clinicians in other dental specialties and health care fields.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Very Well	More Than Adequately	Adequately	Less Than Adequately	Very Poorly
l. Ability to critically evaluate the scientific literature related to pediatric dentistry.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. The formulation of scientific research protocol followed by implementation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. The American Board of Pediatric Dentistry certification process.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. What do you like best about the program? *(Please print.)*

8. Please recommend any changes that could strengthen the program. Consider areas like teaching, courses, faculty, requirements, student evaluation, progress review, patient pool, clinical management. *(Please print.)*

9. Have we met the expectations you had entering the program one year ago? *(Check one.)*

- Very Much So
 For The Most Part
 Somewhat
 Only Slightly
 Not At All

10. Given your experience this past year, would you recommend this program to others? *(Check one.)*

- Definitely Yes
 Probably Yes
 Uncertain
 Probably No
 Definitely No

11. Other comments you would like to make about the program: *(Please print.)*

General Policies for Graduate Programs

Academic Credit

The academic year is divided into two semesters. A credit hour (or semester hour) is approximately equivalent to one class hour per week or approximately fifteen hours per semester. There is not a credit hour requirement for successful completion of a program. Credit hours assigned to each course is for weighting each course for calculation of grade point average.

Methods for Assessing Student Participation in the Learning Process

Student performance is evaluated using multiple measures over time which are reviewed semi-annually using student portfolios. Student performance includes the evaluation of clinical performance using proficiency measures, patient case presentations, course grades, incident and noteworthy reports, patient management record reviews, and self-evaluation of performance. Faculty evaluation and self-evaluation are essential aspects of the learning process. Building self-assessment skills assist students in better monitoring and adjusting their learning as they work toward clinical proficiency in the program. Once they graduate they will need to rely on their self-assessment skills to further refine their skills as they shift from proficiency towards mastery. Studies show that one major factor that discriminates highly successful clinicians from average ones is a refined ability to self-evaluate their performance both during and after the delivery of treatment. Therefore, the Program Evaluation Plan couples faculty evaluation of performance with student self-evaluation activities so as to support the future success of students after completion of the program. The use of student portfolios to compile evidence of their work and accomplishments can be used after the program to seek employment in private practice and/or academics.

Accordingly, not only are students continuously evaluated to ensure adequate feedback that supports effective learning, but they also evaluate the quality of the program and its teaching.

Research Project and Thesis

At the outset of the research phase a research advisor is assigned to each student. The advisor is a faculty member of BUIDRE and is responsible for the selection of a research project, the supervision of all phases of the research project, academic guidance, evaluation of progress, and assistance in writing of the thesis. The thesis project will teach scientific methodology, research techniques, approaches to research questions, development of a hypothesis, data analysis, and the presentation of data. The student is expected to participate in bi-weekly research meetings with his/her research advisor. After completion of the thesis project the student is required to write a thesis according to guidelines stated below. Research projects will be supervised by full-time, on-site BUIDRE faculty members. Faculty members from Boston University may act as second or third readers in the thesis defense process.

Student progress will be monitored and evaluated at regular intervals of not more than one semester duration by the student's Thesis Defense Committee. The Chief Academic Officer is responsible for selecting faculty members to serve on the Committee which will be comprised of all faculty who serve as research advisors for the program and may include additional faculty. Research advisors are required to present an evaluation of the student's activities with respect to the academic performance (course grades not lower than a B), research quality, research

quantity, and attitude towards achieving his/her goals. The committee may make recommendations with respect to changes of the student's project. The committee is responsible for grading each student's performance. Unsatisfactory performance requires recommendations regarding remedial efforts (with or without prolongation of the program) or termination. The Chief Academic Officer will communicate with each student the findings of the committee. Successful completion of the program requires the completion of a thesis according to BUIDRE guidelines and the presentation of the research project in a seminar. Each thesis is evaluated by a first reader (advisor) and in some cases a second reader or a third reader (selected by the Thesis Defense Committee). At the completion of the project the Thesis Defense Committee reviews the final drafts of the student's thesis, provides input for the changes, and makes a final recommendation for awarding the degree.

For detailed instructions on thesis format and requirements, refer to the "Guidelines for Thesis Submission" in Appendix IV of the Student Handbook.

Outline of Study

An outline of the research project, approved and signed by the research advisor, shall be submitted for the approval of the student's program no later than four months after initial registration. This program of study must be submitted to the BUIDRE primary research advisor.

Deadlines for Submission of Thesis or Dissertation

Theses and dissertations must be submitted to the reader eight (8) weeks prior to the anticipated date of graduation. This allows ample time for the thesis/dissertation to be read and for corrections/revisions to be made. Delay in submission may result in postponement of the date of graduation, which, in turn, may result in additional tuition.

Institutional Review Board (IRB)

Under DHCC regulations, an IRB is an appropriately constituted group that has been formally designated to review and monitor biomedical research involving human subjects. In accordance with regulations, an IRB has the authority to approve, require modifications in (to secure approval), or disapprove research. This review group serves an important role in the protection of the rights and welfare of human research subjects.

Policies Regarding Students in Combined Programs

Students in combined programs that offer a certificate and research degree must complete the requirements of each program before they are awarded their certificate and degree. Students will not receive their research degree until they have completed their CAGS program. Students will not receive their certificate until the research project has been submitted, accepted and approved.

Time Limit

The program shall be completed within four years after the first registration for study leading to the MSD degree.

Grading Policy

Grading Scale

Grades awarded for course work at BUIDRE are:

- A = 4.0
- A- = 3.7
- B+ = 3.3
- B = 3.0
- B- = 2.7
- C+ = 2.3
- C = 2.0
- C- = 1.7
- D = 1.0
- F = 0.0
- I = Incomplete
- W = Withdrawal

Please note that there are no A+, D+, D-, F+ or F- grades. A grade of “I” (incomplete) as an interim grade is only awarded in special circumstances such as an inability to complete course work due to illness or personal reasons beyond the student’s control and acceptable to a course director. An interim grade of “I” (incomplete) will not be recorded as a final grade. If the student has not rectified the “I” by no later than 30 days after the close of the semester, the grade will be recorded as W (withdrawn) or F.

Student promotion requires satisfactory completion of all course requirements, both clinical and didactic, and the maintenance of professional ethical standards

Determination of Grades

The methods by which grades are allocated are determined by the course director. Didactic courses are to be *criterion reference* graded. Criterion referencing infers that there are *predetermined* cut-off points or standards matching numerical or percentage grades with corresponding letter grades. (Example: 90-100=A, 80-89=B, 70-79=C, 60-69=D, below 60=F). Norm referencing, which infers that letter grades are assigned to a comparative curve or scale of all the numerical grades in a given examination or course, is not to be used.

Preclinical or clinical courses are also to use criteria-referenced grading, using BUIDRE’s defined competencies and associated criteria of evaluation. Criterion referencing compares students’ work to pre-determined criteria for excellence or goals for the task or project to be graded. The mechanisms for applying criterion-referenced grading must be communicated to the student in a clear fashion (in writing) at the beginning of the course.

Weighting of Course Work

The relative weighting of the various examinations, practical projects or clinical procedures which makes up the final course grade is at the discretion of the course director and will be *clearly provided to the student at the beginning of each course in the course syllabus*. Flexibility

in weighting of course work is not inappropriate but options (such as dropping the worst test score, etc.) must be made known to the students at the beginning of the course.

Weighting of Course Grades (Credits)

Each course is assigned a number of credits. Credit assignment is for the sole purpose of calculating overall grade point average. Graduation is not dependant on accumulating a certain number of credits. Each postdoctoral program has a fixed curriculum and graduation is dependant on passing all courses in the curriculum, demonstrating clinical proficiency in the discipline and completing a research project, and writing and defending a thesis.

Posting Grades

Course directors must inform students of the course grade within ten (10) business days of the final exam or end of course. Course directors may elect to send grades via email to students.

Grade Point Requirement and General Policy Regarding Deficient Grades

Students are expected to maintain a grade point average of 3.0. Grades of “F” or “D” are not acceptable for promotion from year to year or for successful completion of a postdoctoral program. If the program director or curriculum committee allows a student with a deficient grade to remain in a program, that deficient grade must be rectified. A grade of “F” must be rectified by repetition of the course. A grade of “D” may, at the discretion of the course director, be remedied by a written or oral reexamination or completion of an assigned project.

When a student repeats a course in its entirety, the student may be awarded the grade earned for that course. When a deficiency grade is rectified by repeating a course, the original grade remains on the student’s transcript and a new grade is recorded for the year the course is retaken along with the designation “ Repeat or RP”. Successful completion of a remediation option short of repetition of a course in its entirety will result in a grade improvement from a “D” to a “C-“. Improvement of a grade of “D” by this means will be recorded in the transcript as a “C-“ with the designation “ Remediate or RM”.

Remediation of Deficient Grades

Recommendations for scheduling of re-examinations, remediation projects or clinical practical exams for remediation of course failure should be communicated to the Curriculum Committee for review and approval. Furthermore, remediation programs or examinations of any type with the goal of improving a final grade should not be offered to a student without approval of the Curriculum Committee. Students with final grades of "D" will be considered by the Curriculum Committee for the option to take any scheduled re-examination. All students will be informed no later than three weeks prior to the announced dates for re-examination. Upon notification of approval to take re-examination(s) the student must contact the appropriate course director(s) involved and advise them of the intention to be present for the re- examination and must be present on the scheduled date(s). No substitute dates are allowed.

The specific option for remediation of a student's deficient grade is determined by the course director and is based on the *course director's judgment* as to the nature of the student's deficiencies and as to the student's ability to demonstrate mastery of the course material within a given period of time. For example, one student who demonstrates limited minor conceptual

deficiencies may be given a re-examination after a short period of study and tutoring; while it maybe in the best interest of another student who demonstrates a complete lack of understanding of course material to be required to repeat the course. All such remediation decisions must be approved by the Curriculum Committee prior to implementation.

Options for remediation of deficiencies of a didactic course may include:

- Written exam after a review/tutorial period.
- Oral examination.
- Successful completion of a comparable program outside of BUIDRE, the content of which is acceptable to the course director.
- A written paper or essay project.
- A repetition of part of the course.
- A repetition of the course in its entirety.

Options for remediation of deficiencies of a laboratory course may include:

- A special practical exam.
- A remedial period of laboratory work with specific goals or practical examinations
- Repetition of part of the course.
- Repetition of course in its entirety.

Options for remediation of deficiencies of a clinical course may include:

- a remedial period of clinical work with specific goals
- repetition of the clinical course (entire rotation or year).

A student who repeats a course in its entirety may be awarded any grade for the course. When a failed course is repeated in its entirety, both the original failure grade and the newly awarded grade will appear in the transcript. As the process of remediation may extend past the end of the academic year, the original grade is the basis for computation of the student's grade point average for the year. The new grade will be weighted into the following year's grade point average computation.

In general, remediation of failure is applicable for a failing final course grade. Remediation of failure of a single examination or project (quiz, progress exam, mid-term exam, final exam) is not necessary and in most instances inappropriate as scheduling multiple retake examinations during the academic year may be disruptive. However, where a single examination is critical for certification or progression from one area of instruction to another, timely remediation of an individual examination maybe appropriate. Examples might be C.P.R. certification examinations or clinical certification examinations during a preclinical course.

Remediation of Grades other that Failure

In general, short of repeating an entire course, there are no options for improving an existing passing grade (A, B, C) through re-examination or other remedial work.

Written Examinations

1. An instructor will proctor all examinations. Adequate proctors must be available for each room used in the administration of the examination.

2. Rooms should be sufficiently large enough for adequate separation of students. Advance scheduling of all examinations will allow the scheduling of additional classrooms if necessary.
3. Policy statements regarding cheating and consequences of cheating must be discussed with students prior to each examination.
4. Proctors should actively circulate throughout the room observing student behavior.
5. If a student is suspected of trying to get or give information during an examination, the following actions must be taken:
 - a. alert a second proctor (if appropriate);
 - b. proctors shall observe the situation as unobtrusively as possible;
 - c. if proctors observe enough evidence that cheating is occurring, the names of involved students must be noted and reported to the supervising faculty member;
 - d. the supervising faculty member shall provide a written report of the infraction to the course or program coordinator;
 - e. the course director or program coordinator shall provide a written report of the incident to the Chief Academic Officer;
 - f. the examination(s) of the student (s) in question shall be held by the course director until such time as a determination is made.

Clinical and Preclinical Practical Examinations

1. All faculty members in the clinic should be aware of which students are taking a practical examination. This may be facilitated by posting a card on the operatory wall at time of practical examinations.
2. If a student is suspected of trying to get or give information during an examination, the following actions must be taken:
 - a. alert a second proctor
 - b. proctors shall observe the situation as unobtrusively as possible
 - c. if proctors observe enough evidence that cheating is occurring, the names of involved students must be noted and reported to the supervising faculty member
 - d. the supervising faculty member shall provide a written report of the infraction to the course director or program coordinator
 - e. the course director or program coordinator shall provide a written report of the incident to the Chief Academic Officer. The examination(s) of the student(s) in questions shall be held by the course director until such time as a determination is made.

Examination Review Policy

In keeping with BUIDRE's philosophy that examinations and testing situations should be educational as well as evaluative in nature and to ensure timely reporting of performance to students, instructors shall follow the policies below:

1. Written Examinations: Examinations must be corrected, graded and returned to students for discussion of the questions with the class as a whole within two weeks in case of multiple choice exams and three weeks in the case of essay or combined essay/multiple choice exams.
2. Preclinical Laboratory Examinations: Materials, including teeth, restorations and other appliances, and grades, along with a written evaluation, will be returned to the student within three weeks.

3. Clinical Practical Examinations: Written evaluation must be supplied to the student within two weeks after the practical examination. It is directed that each program giving clinical exercise or practical examinations develop a standard, uniform, grade sheet to be utilized by those faculty giving the examination. A copy of this grade sheet, with appropriate comments, is given to the student upon completion of the examination.

Process for Recording Grades

The office of the Manager of Student Services will email grade sheets and grading policies to each course instructor.

Instructors will be required to submit completed grade sheets to the Office of the Manager of Student Services and the Academic Office within ten business days of the last class or final exam.

The Office of the Chief Academic Officer will review course final grades and contact the student and the student's department of any deficiency grades (D or F). For students who receive a grade of "F", the Chief Academic Officer will notify the student that repetition of the course is necessary. For students who receive a grade of "D", the Office of the Chief Academic Officer will discuss arrangements with the course director for a re-examination. Please keep in mind that the course director has sole discretion to determine whether it may be in the best interest of a student who received a grade of "D" to re-take the course in its entirety and not offer a re-examination.

Incomplete grades must be resolved no later than 30 days after the close of the semester.

The Office of the Manager of Student Services will forward transcripts to program directors twice a year, in January and July. Programs may request transcripts, for academic review and advising. When requesting transcripts, departments must give the Manager of Student Services a minimum of 10 working days to prepare student transcripts.

Programs must submit grades to the Manager of Student Services on a grade sheet within ten business days of the end of each semester. Course name, number and final grade must be included. Programs are responsible for submitting research grades for each student. Research advisors must submit grades to the Office of the Manager of Student Services within ten business days of the completion of each academic year.

Library

The Maktoum Harvard Medical Library is available to BUIDRE students, staff and faculty. The library will be opened with 5,000 books and 400 journals plus additional electronic resources. The facility will provide on-line access to numerous journals. The resources that they have access to may be particularly helpful in commercializing research results (e.g., Nexus/Lexus, etc.). Several of these services would require a fairly high cost subscription to access as an individual.

Please refer to the BUIDRE Library Guide Manual for detailed Library Services information.

Accreditation

The Advanced Education Programs will be accredited by the United Arab Emirates Ministry of Education, Commission for Academic Accreditation.

This program follows the standards established by the Commission on Dental Accreditation (CODA) for advanced educational programs in Pediatric Dentistry and the multidisciplinary scope of the specialty certificate examination of the American Board of Pediatric Dentistry.

Currently, the CODA does not accredit international specialty programs. However, the Commission is considering revising this policy, and accreditation of international programs may be instituted in the future. Because the structure and curriculum of the program parallel that of the accredited program in Boston, the program is already prepared to apply for accreditation without any alterations if the CODA changes its policy and begins international accreditation of specialty programs.