Faculty of Dentistry

King AbdulAziz University

Master of Science in Pediatric Dentistry

Program Catalogue

1445 AH

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بسم الله الرحمن الرحيم

TABLE OF CONTENT

INTRODUCTION

The Department of Pediatric Dentistry, Faculty of Dentistry, King Abdulaziz University at Jeddah, Saudi Arabia offers a Master of Science in Pediatric Dentistry. The program was first established and approved in 04/08/1422AH (20/10/2001G).

The M.Sc. in Pediatric Dentistry is a 3-year program that includes clinical training and research in the field of Pediatric Dentistry. The program integrates basic science and clinical Pediatric Dentistry in a comprehensive curriculum, designed to develop clinically proficient specialists who possess a scholarly insight into Pediatric Dentistry-as it relates to patient care. On completion of the program, a professional clinical certificate and master's degree is attained.

Head of Pediatric Dentistry Department

Dr. Nada Bamashmous

VISION, MISSION AND GOALS

VISION:

Leadership and excellence in pediatric dentistry nationally and internationally.

MISSION:

Achieve excellence in teaching and learning, scientific research, leadership and entrepreneurship, and provide distinguished patient care and community service in the field of Pediatric Dentistry.

PROGRAM GOALS:

The Master in Pediatric Dentistry program at King Abdulaziz University aims to achieve excellence in the following:

1. Excellence in Education:

To provide a comprehensive and advanced education in Pediatric Dentistry that will focus on developing the necessary competencies and skills required to provide high-quality care to children and adolescents including those with special health care needs.

2. Excellence in Scientific Research, Innovation and Entrepreneurship:

To promote and conduct innovative research in Pediatric Dentistry that contributes to the advancement of knowledge in the field, fostering a spirit of innovation and entrepreneurship among students.

3. Distinguished Patient Care and Community Service:

To provide high-quality and comprehensive care to children and adolescents including those with special health care needs in the field of Pediatric Dentistry.

To promote and encourage students to engage in community service activities and develop their skills in providing dental care to diverse populations.

4. Effective Leadership:

To cultivate leadership skills in all aspects of pediatric dentistry, enabling students to lead, innovate, and excel in clinical practice, research, education, and community service.

ADMISSION REQUIREMENTS

The Deanship of Graduate Studies Council, based on the proposal of the Department Councilthat is approved by the Faculty Council, decides the number of students who will be admittedfor the next academic year.

The M.Sc. in Pediatric Dentistry Program is one of the general programs of KAU postgraduate programs which is free of charge.

Applications for graduate studies at KAU are 100% electronic through an admission systemto be accessed through the website of the Deanship of Graduate Studies.

Program Specific Admission Requirements:

Applicants must fulfill the general requirements requested by KAU Deanship of Graduate Studies. In addition, for admittance in the Master of Science in Pediatric Dentistry program, the applicants should fulfill the following specific requirements:

GPA	Minimum grade of "Very good"
Qualifications	Bachelor Degree in Dental Medicine & Surgery Certificate of completion of the internship training
Admission written test at the Department	Required
English Language Test	IELTS: 6 and above TOEFL: (480 TOEFL /54 IBT)
Others	Employee approval for full time study

REGULATORY ASPECTS OF THE STUDY PLAN

All regularity aspects of the study plan follow the Unified Rules and Regulations for Postgraduate Studies that is regulated by KAU Deanship for Graduate Studies through its executive rules, policies, and procedures. This includes:

- Program & curriculum establishment & development.
- Admission policies and procedures.
- Academic policies and procedures.
- Financial policies and procedures.
- Electronic procedures for postgraduate studies transactions.

Program specific articles definitions

Academic Year: A full academic year is not less than thirty weeks during which the syllabusis taught, and not including registration, nor final examinations periods.

Study Level: Which indicates the study level and is awarded for a whole academic year.

The Curriculum: A course of study which follows a certain standard within the approved plan study. Each course should have a code, a name and a detailed description of its times which differentiate it, in respect of standard and content, from other courses. Some courses may have requisites, pre-requisites, or co-requisites simultaneously.

Unit of Study:

- A weekly theoretical lecture which is not less than fifty minutes for half a year time,
- A scientific lesson, a clinical lesson or field lesson, which is not less than a hundred minutes for half a year time.

Academic Warning: The notification, which is addressed to the student when he/she has only one chance left for success before rolling his entry.

Annual Grade: Grade awarded for work which shows the achievements of the student throughout the academic year including examinations, research, learning activities related to the curriculum.

Final Examinations: An examination in the curriculum held once at the end of semester or year.

Final Grade: The total annual grade added to the final examination grade in each course.

Evaluation: The description of the percentage or the alphabetical symbol for the final degreeachieved by the student in each course.

General Evaluation: Measurement of learning achievements for the student through his university study.

Policy of Study

1. Study in the faculty of dentistry follows the full academic year system.
2. The prescribed period for obtaining a master's degree is no less than four semestersand not more than eight chapters including a thesis defense.
3. The statutory period is calculated from the beginning of registration in the methodological curriculum plan in which the applicant is accepted.
4. The curriculum is distributed over three levels. Every level has its number of units of study according to study plans.
5. The student does not graduate until after completing the academic degree requirements and with a cumulative GPA not less than very good (3.75).

The policies and procedure for this regulation follows the article (18) and its executive rulesof the Unified Regulations for Graduate Studies and its Implementing Rules.

Postponement of Study

1. A new student cannot postpone studies.
2. The procedure is for a student who has passed one or more semesters.
3. The application is to be made according to the academic calendar.
4. The total period of postponement shall not exceed four semesters.
5. It is not possible to postpone for more than two consecutive semesters, provided that the procedure for each semester is conducted through a separate application.
6. The postponement period is not counted within the maximum period for obtaining the degree.
7. There must be convincing reasons.
8. It is not possible to postpone during additional opportunities.
9. The application is to be electronically submitted from the student's account through the Application System of Graduate Studies.
10. Submitting the application does not mean accepting it, and the student must follow up the application until it is approved.

The policies and procedure for this regulation follows the article (22) and its executive rulesof the Unified Regulations for Graduate Studies and its Implementing Rules.

Withdrawal from Study

1. The procedure is for those who have a study schedule.
2. The procedure is calculated within the number of times of postponements.
3. It is not possible to postpone for more than two consecutive semesters, provided that the procedure for each semester is conducted through a separate application
4. It is not possible to postpone during additional opportunities.
5. The application is to be electronically submitted through the Graduate ApplicationSystem.
6. Submitting the transaction does not mean accepting it, and the student must follow up until it is approved by the Deanship.

The policies and procedure for this regulation follows the article (31) and its executive rulesof the Unified Regulations for Graduate Studies and its Implementing Rules.

Transfer Policy:

From Faculty to Another or from a Department to Another within the Same Faculty

1. Passing (6) academic hours.
2. The average should not be less than very good (3.75).
3. Student must meet the admission requirements for the program to be transferred to.
4. The transfer is for one time, whether inside or outside the faculty
5. Submission of the application is done according to the Academic Calendar.
6. The academic department transferred to carry out the equivalency of some courses if it deemed them in accordance with the plan of the program.
7. The academic department to be transferred to has the right to approve supplementary courses for the student before initiating the studies of the program plan.
8. Application must be electronically submitted from the student's account through the Application System of Graduate Studies.

The policies and procedure for this regulation follows the article (31) and its executive rules of the Unified Regulations for Graduate Studies and its Implementing Rules.

Extension of Study Period

1. There should be an approved application to acknowledge the title of the thesis and to appoint a supervisor.
2. The average should not be less than very good (3.75).
3. The Thesis Supervisor's Evaluation average shall not be less than very good (3.75).
4. Approval of the academic department of the faculty.
5. The number of additional opportunities shall not exceed two semesters.
6. The application is initiated in the last semester of the student's regular term.
7. The additional opportunity is for students of thesis programs only.
8. The application is to be electronically submitted from the student's account through the Application System for Graduate studies.

The policies and procedure for this regulation follows the article (29) and its executive rules of the Unified Regulations for Graduate Studies and its Implementing Rules.

Thesis Registration, Supervision and Examination

1. The student has the right to register his/her thesis title and get an appointed supervisor after passing 50% of the program plan and before finishing the plan.
2. The average GPA should not be less than very good (3.75).
3. The research plan should be approved by the academic department.
4. The selection of the supervisor should be in accordance with the Unified Regulationfor Graduate Studies.
5. Thesis examination requires publication of a paper for the master degree.
6. The thesis must be examined and approved by the Academic Council beforeestablishing and forming the Viva Committee.
7. The members of the Viva committee should be in accordance with the Rules of theUnified Regulation for Graduate studies.
8. The Viva must be conducted after submitting the completed thesis to the academic department in no more than one semester from the application to thesis examination.
9. All thesis registration and examination procedures should be done electronically.

The policies and procedure for this regulation follows the article (42-48, 50, 53-58) and its executive rules of the Unified Regulations for Graduate Studies and its Implementing

Degree Award

The M.Sc. degree in the specialty is awarded after completion of all the followings:

1. Successful completion of all study plan mandated requirements and examinationswith an average not less than very good (3.75).
2. Passing the thesis viva examination.

PROGRAM STUDY PLAN

1. Program Description

Name of Academic Degree	Master of Science in Pediatric Dentistry
Qualification Level	Master's degree by courses and thesis
Department	Pediatric Dentistry
College	Faculty of Dentistry
Institution	King Abdulaziz University

2. Study Plan Framework

Study Plan Framework		No. of Courses	Credit Hours	Percentage
Department Course	Required	**18**	**39**	**59 %**
	Electives	**0**	**0**	**0%**
Faculty Courses	Required	**9**	**11**	**16.67%**
	Electives	**1**	**1**	**1.5%**
Courses From Other Faculties (required)		**1**	**2**	**3%**
Thesis		**1**	**8**	**12.12%**
Total		**33**	**66**	**100%**

3. Program Courses:

Level	Course Code	Course Title	Required or Elective	Credit Hours
1st Y	ANTD 800	Applied Head and Neck Anatomy	Required	2
	ODSC 801	Oral and Maxillofacial Pathology	Required	2
	OBIO 803	Oral Biology	Required	1
	DPHE 806	Research Methods and Design	Required	2
	PEDD 831	Pediatric and Medical Emergencies	Required	2
	PEDO 834	Craniofacial Growth and Development for children and adolescents	Required	1
	PEDO 853	Basic Conscious Sedation	Required	1
	PEDO 832	Principles of Pediatric Dentistry	Required	2
	PEDO 833	Clinical Pediatric Dentistry 1	Required	3
	ODSC 802	Oral Diagnosis and Radiology	Required	1
	DPHE 804	Biostatistics	Required	2
	OMFS 803	Clinical Pharmacology	Required	1
	EDTD 807	Medical Education and Clinical Teaching Skills	Required	1
	PEDO 830	Child Psychology and Behavioral	Required	1
	REST 829	Biomaterials	Elective	1
2nd Y	END 808	Oral Microbiology, Immunology and Cariology	Required	1
	REST 809	Cariology	Required	1
	PEDO 835	Laboratory Technique in Pediatric Dentistry	Required	1
	PEDO 839	Clinics for Children with Special Needs 1	Required	1
	PEDO 837	Topics in Pediatric Dentistry	Required	2
	PEDO 838	Advanced Clinic for Pediatric Dentistry 2	Required	6
	PEDO 840	Topics for Children with Special Health Care Needs	Required	2
	PEDO 825	Interceptive and corrective Orthodontics for Pediatric Patients	Required	4
	PEDO 841	Hospital Dentistry and Anesthesia for children 1	Required	1
	PEDO 846	Clinic For Children with Special Need 2	Required	1
	PEDO 899	Thesis	Required	8
	DPHE 808	Health Ethics and Law	Elective	1

Level	Course Code	Course Title	Required or Elective	Credit Hours
3rd Y	PEDO 842	Advanced Subjects in Pediatric Dentistry	Required	2
	PEDO 844	Multidisciplinary Clinic	Required	2
	PEDO 845	Clinical Pediatric Dentistry 3	Required	6
	PEDO 852	Case Presentation Seminar	Required	2
	PEDO 843	Hospital Dentistry for children (2)	Required	1
	ORD 822	Practice Management in Orthodontics	Elective	1
	PEDO 899	Thesis	Required	8

COURSES DISTRIBUTION BY FACULTY / DEPARTMENT

1. Department Courses:

Department / Division	Course Code	Course Title	Required or Elective	Credit Hours
Pediatric Dentistry Department	PEDO 834	Craniofacial Growth and Development for children and adolescents	Required	1
	PEDO 853	Basic Conscious Sedation	Required	1
	PEDO 832	Principles of Pediatric Dentistry	Required	2
	PEDO 833	Clinical Pediatric Dentistry 1	Required	3
	PEDO 830	Child Psychology and Behavioral	Required	1
	PEDO 835	Laboratory Technique in Pediatric Dentistry	Required	1
	PEDO 839	Clinics for Children with Special Needs 1	Required	1
	PEDO 837	Topics in Pediatric Dentistry	Required	2
	PEDO 838	Advanced Clinic for Pediatric Dentistry 2	Required	6
	PEDO 840	Topics for Children with Special Health Care Needs	Required	2
	PEDO 825	Interceptive and corrective Orthodontics for Pediatric Patients	Required	4
	PEDO 841	Hospital Dentistry and Anesthesia for children 1	Required	1
	PEDO 846	Clinic For Children with Special Need 2	Required	2
	PEDO 899	Thesis	Required	8
	PEDO 842	Advanced Subjects in Pediatric Dentistry	Required	2
	PEDO 844	Multidisciplinary Clinic	Required	2
	PEDO 845	Clinical Pediatric Dentistry 3	Required	6
	PEDO 852	Case Presentation Seminar	Required	2
	PEDO 843	Hospital Dentistry for children (2)	Required	1
Total				**48**

2. Faculty Courses:

Department / Division	Course Code	Course Title	Required or Elective	Credit Hours
Oral Diagnosis	ODSC 801	Oral & Maxillofacial Pathology	Required	2
	ODSC 802	Oral Diagnosis and Radiology	Required	1
Oral Biology	OBIO 803	Oral Biology	Required	1
Dental Public Health	DPHE 806	Research Methods and Design	Required	2
	DPHE 808	Health Ethics and Law	Elective	1
	DPHE 804	Biostatistics	Required	2
Restorative Dentistry	REST 829	Biomaterials	Elective	1
	REST 809	Cariology	Required	1
Endodontics	END 808	Oral Microbiology, Immunology and Cariology	Required	1
Oral Maxillofacial Surgery	OMFS 803	Clinical Pharmacology	Required	1
Orthodontics	ORD 822	Practice Management in Orthodontics	Elective	1
Total				**14**

3. Courses From Other Faculties:

Faculty / Department	Course Code	Course Title	Requiredor Elective	Credit Hours
Faculty of Medicine / Department of Anatomy	ANTD 800	Applied Head and Neck Anatomy	Required	2
Faculty of Applied Medical Sciences	EDTD 807	Medical Education and Clinical Teaching Skills	Required	1
Faculty of Medicine/ Department of Pediatrics	PEDD 831	Pediatric and Medical Emergencies	Required	2
Total				**5**

COURSES DISTRIBUTION BY ACADEMIC LEVEL (YEAR)

LEVEL 1: 1st ACADEMIC YEAR COURSES

Level	Course Code	Course Title	Required or Elective	Credit Hours	Type Didactic Clinical Practical	Contact Hours
1st Y	ANTD 800	Applied Head and Neck Anatomy	Required	2	D+P	1+2
	ODSC 801	Oral and Maxillofacial Pathology	Required	2	D+P	1+2
	OBIO 803	Oral Biology	Required	1	D	1
	DPHE 806	Research Methods and Design	Required	1	D	2
	PEDD 831	Pediatric and Medical Emergencies	Required	2	D+C	1+2
	PEDO 834	Craniofacial Growth and Development for children and adolescents	Required	1	D	1
	PEDO 853	Basic Conscious Sedation	Required	1	D	1
	PEDO 832	Principles of Pediatric Dentistry	Required	2	D	2
	PEDO 833	Clinical Pediatric Dentistry 1	Required	1	C	6
	ODSC 802	Oral Diagnosis and Radiology	Elective	1	D	1
	DPHE 804	Biostatistics	Required	1	D+P	1+2
	OMFS 803	Clinical Pharmacology	Required	1	D	1
	EDTD 807	Medical Education and Clinical Teaching Skills	Required	2	D	1
	PEDO 830	Child Psychology and Behavioral	Required	3	D	1
	REST 829	BIOMATERIALS	Elective	1	D	1
		Total Contact Hours	30			

LEVEL 2: 2nd ACADEMIC YEAR COURSES

Level	Course Code	Course Title	Required or Elective	Credit Hours	Type Didactic Clinical Practical	Contact Hours
2nd Y	END 808	Oral Microbiology, Immunology and Cariology	Required	1	D	1
	REST 809	Cariology	Required	1	D	1
	PEDO 835	Laboratory Technique in Pediatric Dentistry	Required	1	P	2
	PEDO 839	Clinics for Children with Special Needs 1	Required	1	C	2
	PEDO 837	Topics in Pediatric Dentistry	Required	2	D	2
	PEDO 838	Advanced Clinic for Pediatric Dentistry 2	Required	6	C	12
	PEDO 840	Topics for Children with Special Health Care Needs	Required	2	D	2
	PEDO 825	Interceptive and corrective Orthodontics for Pediatric Patients	Required	4	D+ C	2+4
	PEDO 841	Hospital Dentistry and Anesthesia for children 1	Required	1	C	2
	PEDO 846	Clinic For Children with Special Need 2	Required	1	C	2
	PEDO 899	Thesis	Required	8	D	8
	DPHE 808	Health Ethics and Law	Elective	1	D	1
		Total Contact Hours	41			

LEVEL 3: 3rd ACADEMIC YEAR COURSES

Level	Course Code	Course Title	Required or Elective	Credit Hours	Type Didactic Clinical Practical	Contact Hours
3rd Y	PEDO 842	Advanced Subjects in Pediatric Dentistry	Required	2	D	2
	PEDO 844	Multidisciplinary Clinic	Required	2	C	2
	PEDO 845	Clinical Pediatric Dentistry 3	Required	6	C	16
	PEDO 852	Case Presentation Seminar	Required	2	D	2
	PEDO 843	Hospital Dentistry for children (2)	Required	1	C	2
	PEDO 899	Thesis	Required	8	D	8
	ORD 822	Practice Management in Orthodontics	Elective	1	D	1
	Total Contact Hours		33			

COURSES DESCRIPTION

DEPARTMENT COURSES

Course Code	Course Title	Credits	Prerequisite
PEDO 825	**Interceptive and Corrective Orthodontics for Pediatric Patients**	**4**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Describe the classification, presentation, features, and basic management of dental, skeletal, and functional malocclusion in the developing dentition.
2. Describe the indications, application, and interpretation of basic orthodontic diagnostic tools.

Skills:

1. Monitor patient's dental, dento-facial, and general growth and development.
2. Analyze and interpret orthodontic diagnostic aids properly, including orthodontic casts, photograph, and radiograph analyses.
3. Recognize and diagnose dental, skeletal, and functional conditions in the developing dentition that are risk factors for oral diseases/dysfunction accurately.
4. Generate an accurate and prioritized problem list, treatment objectives, treatment options, and an appropriate sequential multi-disciplinary treatment plan for cases requiring interceptive orthodontic management.
5. Determine when an orthodontic opinion should be sought or appropriate timely referral made.

Values:

1. Recognize the value of lifelong learning, self-assessment and critical thinking in maintaining personal career as a holistic pediatric dentist.
2. Demonstrate an understanding of the Pediatric Dentist's leadership role in the management of children with orthodontic treatment, CLP, and craniofacial anomalies.

Topics:

1. Introduction to the course and to interceptive orthodontics
2. An introduction to Orthodontics
3. The etiology of orthodontic problems
4. Patient interview and examination / Facial & smile analysis
5. Dental Photography
6. Study Model Analysis (Bolton analysis)
7. Study Model Analysis (Space analysis)
8. Study Model Analysis (Mixed dentition space analysis)
9. The Orthodontic impression and Orthodontic study model
10. Digital radiography in orthodontics Cephalometric landmarks & Tracing
11. Cephalometric Analysis
12. Ceph (selected articles): Tweed – Rickets - Steiner
13. Introduction to CBCT image interpretation- Panoramic radiography
14. Orthodontic diagnosis - The Problem-Oriented Approach
15. Treatment Planning: From Problem List to Specific Plan
16. Moderate Non-skeletal Problems in Preadolescent Children: Preventive and Interceptive
17. Complex Non-skeletal Problems in Preadolescent Children: Preventive and Interceptive
18. Treatment of Skeletal Transverse and Class III Problems
19. Growth Modification in Class II, Open Bite/Deep Bite, and Multidimensional Problems
20. Canine impaction
21. Risks associated with orthodontic treatment

22. Hypodontia
23. Twin blocks
24. Pediatric sleep Apnea
25. Formative diagnostic exam (Critical thinking, clinical reasoning, & decision-making assessment)
26. RED model Critical thinking, clinical reasoning, & decision-making workshop
27. Formative diagnostic exam review
28. Case-based Learning: Intra-arch Problems
29. Case-based Learning: Inter-arch Problem, Transverse & Functional Problems
30. Case-based Learning: Space-related Problems
31. Treatment plan & clinical portfolio review sessions
32. AAPD Guidelines Review
33. Selected Topic review
34. Case-work-up & clinical portfolio sessions: Apply what you learnt

Assessment Methods:

Teaching Methods:

1. Seminars/ oral presentation (book review) with interactive discussion and feedback
2. Lectures with interactive discussion
3. Case- based presentation & discussion
4. Case-based learning (CBL)

Evaluation Methods:

1. Attendance & participation in practical sessions **6%**
2. Assignments – Topic presentation: **5%**
3. Case- based presentation & discussion:
4. Clinical Cases / Case Portfolio Evaluation

- Case work-up, participation, and reflection on CBL for case-based learning sessions **20%**

5. Quiz **15%**
6. Midyear - Test-based **15%**
7. Final - Test-based **15%**
8. OSPE - Final Case-based written examination **10%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 830	**Child Psychology and Behavioral**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Outline the stages of development from infancy to adolescence, including cognitive, emotional, and social aspects.
2. Recognize the influence of the environment on shaping human personality and behavior during development.
3. Explain children's reactions to dental experiences and the factors that contribute to their responses.
4. Identify various factors that affect child behavior**.**

Skills:

1. Analyze and assess behavioral issues in pediatric dental care.
2. Assess anxiety levels and pain utilizing various scales.
3. Apply clinical knowledge and principles to develop appropriate intervention plans for children of challenging behavioral characteristics.

Values:

1. Emphasize the importance of addressing behavioral issues in pediatric dentistry.
2. Exhibit effective time management and commitment abilities.

Topics:

1. Development of the child patient from the psychological perspective
2. Psychological child development theories
3. Freud theory of personality development
4. Erikson theory of social-emotional development
5. Piaget's theory of cognitive child development
6. Learning theory of child development
7. Contemporary behavior theories
8. Non-pharmacological behavior guidance for the child patient in the dental environment
9. Definition of behavior management
10. Definition of Behavior guidance
11. Behavioral characteristics of the child at different developmental stages
12. Child's Reactions to the Dental Experience
13. Factors affecting child behavior
14. Effect of family attitude on the child behavior
15. General behavior problem/ Environment toxic stress
16. Anxiety level using different scales
17. Pain Using Different Scales
18. Classification of Behavior (by Frankl)
19. Effect of the dentist attitude and dental environment on the child behavior and behavior guidance techniques
20. Behavior guidance of the child in the emergency visit
21. Guidance of the child with Adverse Behavior

22. Management of psychiatric Patient with Special Health Care Needs
23. Further evidence for the validity of the facial image scale
24. The child's voice: understanding the contexts of children and families today
25. Attitudes of contemporary parents toward behavior management techniques used in pediatric dentistry
26. Personality development. Dental care for the Preschool Child
27. Guidelines on Behavior Guidance for The Pediatric Dental Patient
28. Image Scale and Venham Picture Scale. Validation of a Facial Image Scale to assess child dental anxiety
29. Hand book of Pediatric Dentistry chapter 12 (5th edition), AAPD
30. Behavior Management in Dentistry for Children, 2nd Edition , Gerald Z. Wright (Editor), Ari Kupietzky (Editor)
31. The communication of pain in Pediatric Dentistry
32. Usage of Behavior Guidance Techniques Differs by Provider and Practice Characteristics.
33. AAPD Guidelines

Assessment Methods:

Teaching Methods:

1. Lectures with interactive discussions & feedback.
2. In-class activity with discussion & feedback.

Evaluation Methods:

Evaluation will be based on homework assignments and written examination, long and short essay and MCQ.

1. Homework assignment: Topic Assignment: **20%**
2. Written exams: **80%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 832	**Principles of Pediatric Dentistry**	**2**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Demonstrate a comprehensive knowledge and understanding of the theoretical aspects related to the field of Pediatric Dentistry

Skills:

1. Apply theoretical knowledge to conduct comprehensive oral examination and diagno of oral diseases, developmental anomalies and emergencies.
2. Formulate a patient-centered treatment plan and recognize the clinical indications for different treatment approaches.
3. Plan the safe use of different agents and medications in Pediatric patients.
4. Present and transfer information through engaging and informative presentations

Values:

1. Exhibit professional punctuality and timely completion of tasks and responsibilities.

Topics:

1. Child assessment and treatment planning
2. Radiographic assessment
3. Development and Morphology of the Primary Teeth
4. Caries and Prevention of oral diseases
5. Restorative Dentistry
6. Pulp therapy
7. Periodontal Diseases
8. Pain management
9. Developmental anomalies
10. Trauma, sport Dentistry and Abuse
11. Drugs and medical emergencies
12. Discussion sessions

Assessment Methods:

Teaching Methods:

1. Oral presentation with interactive discussion & feedback
2. Case-based learning (CBL)
3. In class activity with discussion and feedback (Mind Mapping /Question Paper).

Evaluation Methods:

1. Oral presentation and discussion **30 (15%)**
2. Homework /Class work Assignments **10 (5%)**
3. Quiz 1 **40 (20%)**
4. Quiz 2 **40 (20%)**
5. Mid-year exam **40 (20%)**
6. Final exam **40 (20%)**

Total: **200 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 833	**Clinical Pediatric Dentistry (1)**	**3**	

Objectives:

At the end of this clinical course the graduate student should be efficiently able to:

Knowledge:

1. Demonstrate mastery in taking detailed medical and dental histories to make a comprehensive treatment decision.
2. Recognize the causes of oral conditions for each patient to create personalized prevention plans.
3. Understand the phases in developing a patient's treatment plan.
4. Identify when to use different (simple / advance) treatment modalities based on patient needs.

Skills:

1. Conduct a thorough exam and treatment plan based on patient requirements, considering the necessity of each diagnostic record.
2. Formulate a comprehensive preventive protocol for the pediatric dental patient.
3. Apply the principles of safe medication use and behavior management in pediatric dentistry.
4. Communicate effectively with all dental team members and the patient.

Values:

1. Demonstrate ethical and professional code of conduct.
2. Encourage self-learning by using evidence-based dental practices to enhance critical thinking, and clinical decision-making based on current scientific evidence and best practices.
3. Demonstrate a Leadership skills, teamwork, and their ability to transfer the knowledge in community work.

Topics:

1. Pre-clinical Laboratory sessions:

Following passing the assessment of the pre-clinical laboratory training, orientation session to the clinical area takes place to prepare the postgraduate students to start their clinical training.

2. Clinical session
3. Case-based Presentation and Discussion (CBD)

Assessment Methods:

Teaching Methods

1. Case- based presentation & discussion (CBD)
2. Interactive discussion in laboratory/clinical sessions with feedback
3. Clinical demonstration & practice with feedback

Evaluation Methods:

1. Case-based Presentation and Discussion using rubric **5%**
2. Preclinical performance via rubric **5%**
3. Case complete evaluation via rubric **10%**
4. Submission of required documents via rubric **(Portfolio / Logbook) 10%**
5. Comprehensive Oral Exam **(Structured Oral Exam) 5%**
6. Clinical Assessment via Semi-Annual Postgraduate Assessment evaluation form (SAPA) **20%**
7. Clinical performance evaluation via electronic file system **20%**
8. Clinical performance evaluation via domains **20%**
9. Self-assessment **5%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 834	**Craniofacial Growth and Development for Children and Adolescents**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Describe the mechanism, principles, and factors regulating craniofacial growth and development.
2. Identify patients at risk of developing craniofacial anomalies & syndromes.
3. Describe different syndromes and their etiological developmental factors.
4. Recognize indications and contraindications for different techniques to manage craniofacial anomalies and syndromes.

Skills:

1. Develop skills in data gathering, problem listing, and treatment planning for children with craniofacial anomalies.
2. Diagnose craniofacial cases that require referral and/ or consultation.
3. Develop alternative treatment plans for different craniofacial anomaly cases.

Value:

1. Foster a commitment to lifelong learning and staying updated with interceptive techniques and procedures for pediatric patients.
2. Demonstrate effective time management skills by completing tasks within specified timeframes.

Topics:

1. Introduction to craniofacial sedation Course: Course Schedule, course passing requirement, Study Material, Faculty Member, and Assessment Strategy.
2. Embryology – Neural crest derivatives, Branchial arch derivatives W2 1H Lecture
3. Pathology of the first branchial arch, Malformations, Clefts of lip, Palate and Face, Anodontia, Cleido-cranial dysostosis, Maldevelopments, Achondroplasia,treacher collin's syndrome and craniosynostosis
4. Management of cleft lip and palate
5. Post-natal development: growth spurts, facial and general-body proportion as well as growth curves, Maxillary growth and development, Mandibular growth and development, Cranial growth and development, Facial growth patterns, Somatic growth and development of the child.
6. Theories of growth: Moss, Scott, Sicher, Enlow, Bjork, Servo system theory
7. Time in clinic to look for craniofacial cases (self learning)
8. Craniofacial day event: present cases and submit educational material

Assessment Methods:

Teaching Methods:

1. Lecture with Interactive discussion
2. In class activity with discussion and feedback
3. Case Based Learning (CBL)
4. Case-based Presentation & discussion (CBD)

Evaluation Methods:

1. Classwork Assignment: Question Paper **10%**
2. Homework assignment: topic assignment **10%**
3. Case-based presentation & discussion **20%**
4. Test-based (MCQ/ Short Essay) **60%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 835	**Laboratory Technique in Pediatric Dentistry**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Describe the different types of fixed and removable orthodontic appliances used in pediatric dentistry.
2. Recognize the theoretical principles, techniques and details in the fabrication of orthodontic appliances.

Skills:

1. Design different orthodontic appliances used in pediatric dentistry on study models.
2. Perform the laboratory steps involved in the fabrication of fixed and removable orthodontic appliances.
3. Critically analyze and evaluate different orthodontic appliances and their suitability for specific cases.
4. Communicate and collaborate with classmates to enhance the learning experience and share knowledge and insights.

Values:

1. Foster a commitment to continuous learning and staying updated with advancements in orthodontic techniques and practices.
2. Demonstrate effective time management skills by consistently completing tasks within specified timeframes.

Topics:

1. Course introduction
2. Band and loop space maintainer
3. Distal shoe space maintainer
4. TPA & Nance appliance
5. Lingual arch
6. Quad Helix
7. W arch
8. Lip bumper
9. Palatal crib
10. Rapid Palatal expansion
11. Mouth Guard
12. Hawley appliance
13. Hawley appliance with screw
14. Removable partial denture
15. Functional appliance (twin Block)
16. Appliances delivery

Assessment Methods:

Teaching Methods:

1. Oral Presentation with interactive discussion and feedback
2. Laboratory demonstration & practice with feedback
3. Interactive discussion in laboratory sessions with feedback

Evaluation Methods:

1. Oral Presentation & Discussion **20%**
2. Workplace-based assessment (Graded Lab work) **50%**
3. Assignment **25%**
4. Attendance **5%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 837	**Topics in Pediatric Dentistry**	**2**	**PEDO 832**

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Demonstrate comprehensive understanding of the diagnosis and treatment planning processes in paediatric dentistry.
2. Recognize the current trends in caries prevention and restoration in children.
3. Understand the various behaviour guidance techniques used in paediatric dental care.

Skills:

1. Review articles critically highlighting their areas of weakness and strength.
2. Communicate and collaborate with supervisors and colleagues in scientific discussions and recent updates related to assigned topics.
3. Search for relevant, up-to-date publication nationally in Saudi Arabia using PubMed, Google, or Saudi Dental Library.

Values:

1. Demonstrate proficient time management skills to ensure efficient and timely completion of tasks and commitments.

Topics:

Reading list includes, but are not limited to, articles about: Diagnosis and treatment planning, preventive dentistry, restorative dentistry, radiology and behavior guidance.

Assessment Methods:

Teaching Methods:

1. Seminars (scientific article discussion)
2. In class activity: Article review, critique, and discussion with feedback

Evaluation Methods:

1. Oral presentation and discussion **30%**
2. Homework/Classwork Assignment: Article Critique and Appraisal **10%**
3. Quiz 1 (MCQ and Essay) **15%**
4. Quiz 2 (MCQ and Essay**) 15%**
5. Midyear exam (MCQ and Essay) **15%**
6. Final exam (MCQ and Essay) **15%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 838	**Clinical Pediatric Dentistry (2)**	**6**	**PEDO 833**

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Demonstrate mastery in taking detailed medical and dental histories to make a comprehensive treatment decision.
2. Recognize the causes of oral conditions for each patient to create personalized prevention plans.
3. Understand the phases in developing a patient's treatment plan.
4. Identify when to use different (simple / advance) treatment modalities based on patient needs.

Skills:

1. Conduct a thorough exam and treatment plan based on patient requirements, considering the necessity of each diagnostic record.
2. Formulate a comprehensive preventive protocol for the pediatric dental patient.
3. Apply the principles of safe medication use and behavior management in pediatric dentistry.
4. Communicate effectively with all dental team members and the patient.
5. Practice clinical teaching to undergraduate students / community work.

Values:

1. Demonstrate ethical and professional code of conduct.
2. Encourage self-learning by using evidence-based dental practices to enhance critical thinking, and clinical decision-making based on current scientific evidence and best practices.
3. Demonstrate a Leadership skills, teamwork, and their ability to transfer the knowledge in a community work.

Topics:

1. Clinical session
2. Case-based Presentation and Discussion in multiple topics covered in the syllabus.

Assessment Methods:

Teaching Methods:

1. Case- based presentation & discussion (CBD).
2. Interactive discussion in laboratory/clinical sessions with feedback.
3. Clinical demonstration & practice with feedback.

Evaluation Methods:

1. Case-based Presentation and Discussion using rubric **15%**
2. Case complete evaluation via rubric **10%**
3. Submission of required documents via rubric **5%**
4. Supervision of Undergraduate Supervision via rubric **2 %**
5. Participation in a community Service via rubric **1%**
6. ER coverage via rubric **2%**
7. Comprehensive Final Exam **(Structured Oral Exam) 5%**
8. Clinical Assessment via Semi-Annual Postgraduate Assessment evaluation form (SAPA) **20%**
9. Clinical performance evaluation via electronic file system **20%**
10. Clinical performance evaluation via domains **20%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 839	**Clinics for Children with Special Needs (1)**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. List common special health care needs, their oral manifestations, and medical and dental management protocols

Skills:

1. Diagnose orofacial health problems of children with health care needs (CSHCN).
2. Construct an individualized comprehensive prevention and treatment plan for a patient and deliver the required care.
3. Evaluate full medical and dental histories from parents and extract relevant health information from medical records.
4. Critically analyze and discuss the causes, symptoms, and potential treatments of various medical disorders.
5. Effectively and professionally communicate collaborate with classmates and with medical colleagues regarding CSHCN.

Values:

1. Demonstrate empathy and ethical conduct while providing dental care to CSHCN and their families, adhering to all relevant legal standards.

Topics:

1. The course offers a dynamic clinical experience centered around children with special health care needs encountered in the clinic. Rather than pre-selecting topics, the content adapts to the diverse disorders observed in clinical settings. Students engage in case presentations and discussions with instructors who highlight pertinent medical concepts. Active participation, questioning, and proposing treatment plans are encouraged, fostering a collaborative learning environment. Instructors pinpoint knowledge gaps, facilitating in-depth discussions to ensure a well-rounded understanding. Ultimately, the course cultivates practical skills and patient-centered thinking, preparing students effectively for their future clinical endeavors.
2. Topic presentation

Assessment Methods:

Teaching Methods:

1. Self-directed learning
2. In-class activity with discussion and feedback
3. Interactive discussion in clinical sessions with feedback

Evaluation Methods:

1. Workplace-based Assessment (Clinical performance via rubric) **35%**
2. Assignments (Classwork / Homework) – Topic summary and discussion **3%**
3. Attendance policy: Students are expected to attend all the sessions. Absence is expected to stay below 20% (according to the university regulations). **2%**
4. Case – Based Discussion via rubric **40%**
5. Competency Exam (CE) (Clinical) – Consultations **10%**
6. Clinical Cases / Case Portfolio Evaluation **10%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 840	**Topics for Children with Special Health Care Needs**	**2**	**-**

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Describe the diagnosis and management modalities for children with SHCNC.
2. Evaluate the oral findings commonly observed in children with SHCNC and their relationship to the associated systemic conditions.
3. Understand the different modalities of pharmacological behavior management techniques for children with (SHCNC).

Skills:

1. Develop advanced skills in presenting information about each disease, utilizing a structured and organized approach.
2. Analyze and compare data about each disease in Saudi Arabia, contrasting it with international data.
3. Critically appraise selected articles using established criteria and evidence-based principles

Values:

1. Demonstrate proficient time management skills to ensure efficient and timely completion of tasks and commitments.

Topics:

Reading list includes, but are not limited to, articles about; Pediatric patients who are especially vulnerable to the effects of oral diseases such as patients with compromised immunity (e.g., leukemia or other malignancies, human immunodeficiency virus) , cardiac conditions associated with endocarditis ,diabetes mellitus or osteoporosis. Patients with mental, developmental, or physical disabilities who do not have the ability to understand, assume responsibility for, or cooperate with preventive oral health practices.

Reading list also includes disorders or conditions which are manifest only in the orofacial complex (e.g., amelogenesis imperfecta, dentinogenesis imperfecta, cleft lip/palate, oral cancer).

Assessment Methods:

Teaching Methods:

1. Seminars (scientific article discussion)
2. In class activity: Article review, critique, and discussion with feedback

Evaluation Methods:

1. Oral presentations and discussions **30%**
2. Homework/Classwork Assignment: Article Critique and Appraisal **10%**
3. Quiz 1 (essay) **15%**
4. Quiz 2 (essay) **15%**
5. Mid-year Exam (essay) **15%**
6. Final exam (essay) **15%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
PEDO 841	**Hospital Dentistry and Anesthesia for Children (1)**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Identify the mode of action of the anesthesia during general anesthesia procedures.

Skills:

1. Assess the effects of pharmacological agents
2. Apply the required general anesthetic workup, assessment, admission, dictation, and discharge for patients.
3. Assist and carry out full mouth rehabilitation protocol for healthy patients under general anesthesia.
4. Assess in monitoring anesthesia procedures with precision during induction, intubation extubating.
5. Ensure clear and effective communication with parents, patients, physicians, and the dental team regarding all requirements for general anesthesia.

Values:

1. Thoroughly document all necessary records for general anesthesia in strict adherence to professional codes of conduct.

Topics:

An anesthesia rotation structured to provide students with knowledge and experience in the management of children and adolescents undergoing general anesthesia.

The rotation includes experience in admission of patients into the hospital ward for full dental rehabilitation under general anesthesia, pre/post-surgery assessment, laboratory tests, OR Protocol, Writing and dictating OR reports. Moreover, that includes pre-operative evaluation, assessing the effects of pharmacological agents, venipuncture technique, patient monitoring, anesthetic induction, intubation and extubating, administration of anesthetic agents, prevention and management of anesthetic emergencies and patient recovery.

Assessment Methods:

Teaching Methods:

1. Interactive discussion in laboratory/clinical sessions with feedback
2. Clinical demonstration & practice with feedback

Evaluation Methods:

1. Case-based Discussion using rubric **5%**
2. Clinical Cases / Case Portfolio – 10 cases **10%**
3. File auditing: informed consent, documentation of clinical procedures – 10 cases **10%**
4. Workplace-based Assessment – (Clinical Performance Evaluation via rubric.
    a. Assisting – Chair side / Table side **5%**
    b. Anesthesia / sedation rotation **10%**
5. Clinical competency exam evaluation – Split mouth quadrant dentistry **10%**
6. Clinical performance evaluation via electronic file **30%**
7. Clinical Assessment via Semi-Annual Postgraduate Assessment evaluation form (SAPA) **20%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 842	**Advanced Subjects in Pediatric Dentistry**	**2**	**PEDO 840**

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Demonstrate a comprehensive understanding of growth theories in pediatric dentistry.
2. Identify and analyze various malocclusion problems in pediatric patients.
3. Explain the diagnosis principles and techniques and pulp therapies for primary and permanent dentition.
4. Recognize and evaluate different types of traumatic injuries in pediatric dentistry.

Skills:

1. Critically review and appraise assigned articles related to pediatric dentistry.
2. Present research findings and literature reviews effectively to a professional audience.
3. Use PubMed, google, SDL to search for updated related articles national and locally in Saudi Arabia.

Values:

1. Adopt a life-long learning philosophy and pursue professional development.

Topics:

The reading list is adopted from the American Board of Pediatric Dentistry, Reading list includes articles about: Growth and development and orthodontics, Pulp therapy for pediatric patient, Traumatic injury of pediatric patient, Critical Review of the Literature.

Assessment Methods:

Teaching Methods:

1. Seminars (Scientific article discussion)
2. In class activity: Article review, critique and discussion with feedback

Evaluation Methods

1. Oral Presentation & Discussion Rubric **20%**
2. Homework/Classwork Assignment: Article Critique and Appraisal **5%**
3. Case-based Presentation and Discussion rubric **5%**
4. Test-based (MCQ/short/long essay) - Mid-term **exam 30%**
5. Test-based (MCQ/short/long essay) - Final written **exam 40%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
PEDO 843	**Hospital Dentistry for Children (2)**	**1**	**PEDO 841**

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Identify the mode of action of the anesthesia during general anesthesia procedures.
2. Classify the dental patients approach based on their medical condition.

Skills:

1. Assess the effects of pharmacological agents
2. Apply the required general anesthetic workup, assessment, admission, dictation, and discharge for healthy and SHCN patients.
3. Carry out the Oral Rehabilitation Protocol for healthy and SHCN patients under general anesthesia.
4. Monitor anesthesia procedures with precision during induction, intubation extubating.
5. Ensure clear and effective communication with parents, patients, physicians, and the dental team regarding all requirements for general anesthesia

Values:

1. Thoroughly document all necessary records for general anesthesia in strict adherence to professional codes of conduct.

Topics:

An anesthesia rotation structured to provide students with knowledge and experience in the management of children and adolescents undergoing general anesthesia.
The rotation includes experience in admission of patients into the hospital ward for full dental rehabilitation under general anesthesia, pre/post-surgery assessment, laboratory tests, OR Protocol, Writing and dictating OR reports. Moreover, that includes pre-operative evaluation, assessing the effects of pharmacological agents, venipuncture technique, patient monitoring, anesthetic induction, intubation and extubating, administration of anesthetic agents, prevention and management of anesthetic emergencies and patient recovery.
Management of hospitalized children under the domain of SHCN patients (Blood disorders, Bleeding disorders, Cardio-vascular disease, Bone marrow transplant, Cancer, Cellulitis)
Participation in hospital interdisciplinary evaluation and treatment teams such as the cleft team or the hemophiliac team.

Assessment Methods:

Teaching Methods:

1. Interactive discussion in laboratory/clinical sessions with feedback
2. Clinical demonstration & practice with feedback

Evaluation Methods:

1. Case-based Discussion using rubric **5%**
2. Clinical Cases / Case Portfolio – 10 cases **10%**
3. File auditing: informed consent, documentation of clinical procedures – 10 cases **10%**
4. Workplace-based Assessment – (Clinical Performance Evaluation via rubric.
    a. Assisting – Chair side / Table side **5%**
    b. Anesthesia / sedation rotation **10%**
5. Clinical competency exam evaluation – Split mouth quadrant **dentistry 10%**
6. Clinical performance evaluation via electronic file **30%**
7. Clinical Assessment via Semi-Annual Postgraduate Assessment evaluation form (SAPA) **20%**

Total: **100 Marks.**

Course Code	Course Title	Credits	Prerequisite
PEDO 844	**Multidisciplinary Clinic**	**2**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Understanding the importance of timely consultations and referrals to ensure optimal patient care
2. Familiarity with comprehensive treatment planning beyond conventional preventive and restorative management.

Skills:

1. Diagnose orofacial health problems in children and adolescents, including those with special healthcare needs.
2. Demonstrate proficiency in utilizing dental radiographs and Cone Beam CT scans as diagnostic tools, accurately interpreting patient radiographs to formulate effective treatment plans.
3. Perform thorough and comprehensive clinical dental examinations for pediatric patients and develop treatment plans tailored to the specific needs and complexities of pediatric dental patients.
4. Implement a multidisciplinary treatment approach for children or adolescents requiring such intervention or concise consultations and/or referral letters to medical and other dental specialties.
5. Communicate proficiently with patients, parents, dental assistants, technicians, and consultants.

Values:

1. Apply ethical and legal standards in the provision of dental care, including obtaining parental consent for treatment in accordance with established guidelines and regulations.

Topics:

The course offers clinical experience as a multidisciplinary approach. Students engage in case presentations and discussions with instructors who highlight pertinent medical concepts. Active participation, questioning, and proposing treatment plans are encouraged, fostering a collaborative learning environment. Instructors pinpoint knowledge gaps, facilitating in-depth discussions to ensure a well-rounded understanding. Ultimately, the course cultivates practical skills and patient-centered thinking, preparing students effectively for their future clinical endeavors.

Oral Presentation and Discussion – 5 cases

1. Trauma case
2. The remaining 4 cases could be any of the following: (Endo case, Surgery case, Periodontal case, Prosthodontic case)
3. Craniofacial cases (such as cleft lip and/ or palate cases) - will receive a bonus for these cases.

Assessment Methods:

Teaching Methods

1. Interactive discussion in clinical sessions with feedback (observation-based assessment)
2. Interactive discussion in clinical sessions with feedback (performance-based assessment)

Evaluation Methods:

1. Workplace-based Assessment (Clinical performance via rubric) **45%**
2. File auditing **5%**
3. Oral Presentation and Discussion (Treatment plan presentation) – 5 cases **25%**
4. Clinical Cases / Case Portfolio Evaluation – 5 cases **25%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
PEDO 845	**Clinical Pediatric Dentistry (3)**	**6**	**PEDO 838**

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Demonstrate mastery in taking detailed medical and dental histories to make a comprehensive treatment decision.
2. Recognize the causes of oral conditions for each patient to create personalized prevention plans.
3. Understand the phases in developing a patient's treatment plan.
4. Identify when to use different (simple / advance) treatment modalities based on patient needs.

Skills:

1. Conduct a thorough exam and treatment plan based on patient requirements, considering the necessity of each diagnostic record.
2. Formulate a comprehensive preventive protocol for the pediatric dental patient.
3. Apply the principles of safe medication use and behavior management in pediatric dentistry.
4. Communicate effectively with all dental team members and the patient.
5. Practice clinical teaching to undergraduate students / community work

Values:

1. Demonstrate ethical and professional code of conduct
2. Encourage self-learning by using evidence-based dental practices to enhance critical thinking, and clinical decision-making based on current scientific evidence and best practices.
3. Demonstrate a Leadership skills, teamwork, and their ability to transfer the knowledge in a community work

Topics:

Clinical sessions

Assessment Methods:

Teaching Methods:

1. Interactive discussion in laboratory/clinical sessions with feedback
2. Clinical demonstration & practice with feedback

Evaluation Methods:

1. Case-based Discussion using rubric **5%**
2. Case complete evaluation via rubric **15%**
3. Submission of required documents via rubric **10%**
4. Supervision of Undergraduate Supervision via rubric **2%**
5. Participation in a community Service via rubric **3%**
6. ER coverage via rubric **5%**
7. Comprehensive Final Exam **(Structured Oral Exam) 5%**
8. Clinical Assessment via Semi-Annual Postgraduate Assessment evaluation form (SAPA) **15%**
9. Clinical performance evaluation via number of procedures **20%**
10. Clinical performance evaluation via domains **20%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
PEDO 846	**Clinics of Children with Special Needs (2)**	**1**	**PEDO 839**

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. List common special health care needs, their oral manifestations, and medical and dental management protocols

Skills:

1. Diagnose orofacial health problems of children with health care needs (CSHCN)
2. Construct an individualized comprehensive prevention and treatment plan for a patient and deliver the required care
3. Evaluate full medical and dental histories from parents and extract relevant health information from medical records
4. Critically analyze and discuss the causes, symptoms, and potential treatments of various medical disorders.
5. Demonstrate good presentation skills in preparing and presenting a case of CSHCN
6. Effectively and professionally communicate collaborate with classmates and with medical colleagues regarding CSHCN

Values:

1. Demonstrate empathy and ethical conduct while providing dental care to CSHCN and their families, adhering to all relevant legal standards.

Topics:

1. The course offers a clinical experience centered around children with special health care needs encountered in the clinic. Students engage in case presentations and discussions with instructors who highlight pertinent medical concepts. Active participation, questioning, and proposing treatment plans are encouraged, fostering a collaborative learning environment. Instructors pinpoint knowledge gaps, facilitating in-depth discussions to ensure a well-rounded understanding. Ultimately, the course cultivates practical skills and patient-centered thinking, preparing students effectively for their future clinical endeavors.
2. Oral presentation

Assessment Methods:

Teaching Methods

1. Self-directed learning
2. In class activity with discussion and feedback
3. Interactive discussion in clinical sessions with feedback

Evaluation Methods

1. Workplace-based Assessment (Clinical performance via rubric**) 35%**
2. Assignments (Classwork / Homework) – Topic summary and discussion **3%**
3. Attendance policy / Class participation **2%**
   Students are expected to attend all the sessions. Absence is expected to stay below 20% (according to the university regulations).
4. Competency Exam (CE) (Clinical) – Consultations **10%**
5. Case-based Discussion via rubric **40%**
6. Clinical Cases / Case Portfolio Evaluation **10%**

Total: **100 Marks**

Course Code	Course Title	Credits	Prerequisite
PEDO 852	**Case Presentation Seminar**	**2**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Identify comprehensive medical / dental health problems presented clinically or radiographically for the pediatric patients.
2. Summarize available updated literature about the topic covered within the case.

Skills:

1. Perform a proper examination, documentation, multidisciplinary consultations, and appropriate treatment planning within the pediatric patients.
2. Critically appraise treatment plan presented by his / her colleague.
3. Discuss literature for articles related to the case presented
4. Communicate effectively with faculty members and colleagues
5. Build a good presentation skill

Values:

1. Demonstrate ethical values when presenting data about the patients without jeopardizing the patient's confidentiality.
2. Certify that the treatment provided to the patient presented is the residents' responsibility.

Topics:

Each week a new case is presented by all levels of postgraduate students as scheduled and discussed during the seminar based on their six clinical cases.

M1 – Restorative therapy for a child without pharmacological behavioral intervention.

M2 / M3 - Any other cases from the remaining five categories as traumatic injuries, periodontal therapy, active treatment of malocclusion, restorative therapy using sedation or general anesthesia, restorative therapy for a child with a special health care need, other than restorative therapy for a child without pharmacological behavioral intervention.

Assessment Methods:

Teaching Methods:

1. Case-based Presentation and Discussion
2. Self-directed learning (SDL)
3. Class discussion
4. In class activity with discussion and feedback

Evaluation Methods:

1. Case-based presentation and discussion using rubric case 1 **40%**
2. Case-based presentation and discussion using rubric case 2 **50%**
3. Comprehensive Oral Exam **(Structured Oral Exam) 10%**

Course Code	Course Title	Credits	Prerequisite
PEDO 853	**Basic Conscious Sedation**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Describe different sedation medications, routes of administration, indications, contraindications, and its reversal medications.

Skills:

1. Assess pediatric patients' pre-sedation based on the American Society of Anesthesia classification and monitor patients during and post sedation.
2. Formulate pharmacological behavioral treatment plan in visits
3. Perform professionally sedation levels through appropriate monitoring, utilizing basic life support steps on a high-fidelity mannequin, evaluating the scene and staff preparedness for emergencies, and finally, managing potential complications arising from variable sedation with the proper medications and equipment.
4. Communicate effectively with different team members included within the sedation steps.

Values:

1. Implement the code of dental ethics and professionalism in their relationship with supervisors, patient and their guardians, peers and auxiliaries.

Topics:

1. Introduction to Basic conscious sedation Course: Course Schedule, course passing requirement, Study Material, Faculty Member, and Assessment Strategy.
2. Routes of sedation
3. Pharmacokinetics and pharmacodynamic of different medication used in sedation.
4. Drugs commonly used for sedation.
5. Case selection for different routes of sedation
6. Sedation complication and adverse events.
7. Applications of nitrous oxide for procedural sedation in the pediatric population lecture and workshop at JEDMED center (workshop)
8. Introduction to the simulation room
9. Crisis resource management
10. Procedural sedation and analgesia in children
11. Practice Guidelines for Sedation and Analgesia by Non-Anesthesiologists
12. AAPD (Guidelines for Monitoring and Management of Pediatric Patients Before, During, and After Sedation for Diagnostic and Therapeutic Procedures)
13. Case presentation and case-based learning and discussion (CBL)
14. Pediatric sedation in clinical skill lab, Crisis resource management (CBL) / Preclinical session
15. Hands on clinical skill exam on skill lab

Assessment Methods:

Teaching Methods:

1. Lectures with interactive discussion
2. Interactive discussion in laboratory sessions with feedback
3. Simulation
4. Case- based presentation & discussion (CBD)

Evaluation Methods:

1. Case-based Presentation and Discussion **20%**
2. Workplace-based Assessment (Practical performance via rubric) **10%**
3. Oral presentation and discussion **20%**
4. In class participation activity **10%**
5. Test-based written exam **20%**

6. Competency Exam (CE) (Practical/ Clinical / Simulated)
    a- High fidelity sedation **15%**
    b- Low fidelity identification **15%**

Total: **100 Marks.**

Course Code	Course Title	Credits	
PEDO 899	**Thesis**	**8**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Recognize the fundamentals, principles, methodology, and ethics of the pediatric scient research.
2. Recognize the different hierarchies of evidence.
3. Demonstrate a sound understanding of the purpose and principles of statistical analysis research.

Skills:

1. Conduct a scientific research study based on a well-designed experimental research des gathering, and data analysis.
2. Formulate an innovative and original research project.
3. Select a research problem and formulate research questions based on identifying researc the literature.
4. Develop skills to analyze the research findings, compare them with the findings of previous studies, and explain them
5. Write a research proposal, thesis, or paper for submission of publishable quality in the field of pediatric dentistry.
6. Use efficiently the library and recent digital technology to conduct scientific research.
7. Present and defend the research proposal, findings, or thesis to supervisors, the defense colleagues, or at specialists' meetings

Values:

1. Show commitment with high autonomy to the ethical standards and with honesty and in conducting scientific research.
2. Respond appropriately and effectively to feedback from supervisors and able to improv performance.
3. Maintain the responsibilities related to continuing professional development and use a l learning philosophy.
4. Manage time and research difficulties effectively.

Topics:

1. Research proposal writing includes the following: selection of a research problem, prop question that can be researched, statement of a hypothesis, sample size calculation, proc collecting data and the statistical analysis involved, and time to complete the study.
2. Introduction.
3. Review of literature relevant to the research.
4. Research methodology.
5. Research results.
6. Discussion.
7. Summary and conclusions.
8. Recommendations /future works related to the research.
9. References selection and writing.
10. Thesis defense.
11. Paper publication / Conference presentation

Assessment Methods:

Teaching Methods:

1. Attendance of suitable courses in the program

2. Supervisor's instructions & discussion with feedback
3. Self-directed learning

Evaluation Methods:

1. Research reports **Pass/Fail**
2. Research Proposal / Ethical Approval **Pass/Fail**
3. Semiannual evaluation report on student's progress using rubric. **Pass/Fail**
4. Research Paper / Conference Presentation / Plagiarism Report **Pass/Fail**
5. Thesis defense **Pass/Fail**

FACULTIES Courses

Course Code	Course Title	Credits	Prerequisite
ODSC 802	**Oral Diagnosis and Radiology**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Describe the fundamentals of digital imaging and how it is integrated into the practice of dentistry.
2. Describe advanced imaging techniques appropriate for the diagnosis of patients with complex abnormalities including techniques such as CBCT, computed tomography (CT) and magnetic resonance imaging (MRI).
3. Demonstrate knowledge of cross-sectional anatomy of the mandible and maxilla.
4. Describe the indications, contra-indications, advantages, and limitations of different common dental radiographic examinations.
5. Recognize and describe radiographic signs of some maxillofacial diseases including paranasal sinuses diseases, bone diseases, inflammatory conditions, developmental anomalies, and TMD.

Skills

1. Compare and contrast between digital and film-based imaging in the practice of dentistry.
2. Compare different imaging modalities used in the diagnosis and management of patients with complex abnormalities regarding indications, contra-indications, advantages, and limitations.
3. Correlate radiographic signs of some maxillofacial diseases to their clinical presentation.

Values:

1. Describe radiation risks of dental x-ray procedures and how to implement a radiation safety program in dental practice

Topics:

1. Radiation Risk and Protection in Dentistry.
2. Digital Imaging and Image Processing.
3. CT and MRI in Dentistry.
4. Cone Beam Computed Tomography (CBCT).
5. Radiographic Prescription Guidelines.
6. Review of Principles of Radiologic Interpretation.
7. Sinuses Diseases.
8. Bone Diseases.
9. Inflammatory Conditions.
10. Developmental Anomalies.
11. Temporo-Mandibular Dysfunction/Disorders (TMD).
12. Tutorial
13. Revision

Assessment Methods:

Teaching Method:

1. Lectures
2. Presentation assignment
3. Question & Answer assignment
4. In class activity with discussion and feedback

Evaluation Methods:

1. In-class activities **8%**
2. Presentation assignment**s 8%**
3. Question & answer assignment **24%**
4. Final written exam **60%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
OBIO 803	**Oral Biology**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Recognize the mechanisms of biological process and reactions in the oral cavity.
2. Demonstrate understanding of cellular and molecular events behind biological behavior of oral tissues and how they affect clinical outcomes.
3. Outline the important biological process in the oral cavity which increase the efficiency during his/her clinical training.
4. Recognize the true nature of any oral disorders and be able to monitor any changes in the normal tissues.

Skills

1. Apply the acquired knowledge of oral biological processes to clinical practice.
2. Communicate different forms of arguments effectively in a variety of contexts.
3. Evaluate assumptions, implications, and consequences of biological studies, and transfer this knowledge to clinical situations.

Values

1. Work in teams, negotiate, and deliver the information in professional way.

Topics:

1. Introduction to Oral Biology.
2. Bone biology and regeneration.
3. Oral Biofilm.
4. Robotics.
5. Inflammation.
6. Stem cells.

Assessment Methods:

Teaching Methods:

1. Lectures
2. Article summary assignment

Evaluation Methods:

1. Article summary assignment **30%**
2. Final written exam **70%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
DPHE 804	**Biostatistics**	**2**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Describe statistics commonly used in the dental literature.

Skills

1. Interpret statistics commonly used in the dental literature.
2. Choose the appropriate statistical technique to use in a given situation.
3. Interpret output from SPSS related to the statistical techniques used.
4. Implement basic statistical techniques using the statistical software package SPSS.
5. Communicate data analysis findings and interpretation effectively.

Values:

1. Take responsibility and commitment to the discipline by professional planning for learning, and development.

Topics:

1. Introduction to the course
2. Introduction to biostatistics and types of data
3. Tabular presentation of data
4. Graphical presentation of data
5. Measures of central tendency and dispersion
6. Probability distributions
7. Hypothesis testing
8. One & two-sample t tests
9. ANOVA
10. Midterm Exam
11. Chi-square test & odds ratio
12. Correlation & introduction to regression
13. Sample size & power analysis
14. Tutorial & feedback session
15. Revision & feedback session

Assessment Methods:

Teaching Methods:

1. Illustrated audio- visual aided lectures.
2. Interactive discussion.
3. Computer lab application

Evaluation Methods:

1. Pop quizzes **40%**
2. Weekly assignments/ in-class activities) **20%**
3. Midterm **10%**
4. Final exam **30%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
ODSC 801	**Oral and Maxillofacial Pathology**	**2**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Recognize the characteristic clinic-pathological features of soft and hard tissue lesions affecting the oral and surrounding structures.
2. Describe the histopathological changes of soft and hard tissue lesions which may result in the clinical features.

Skills

1. Correlate the histopathological and clinical aspects of soft and hard tissue lesions to establish a differential or definitive diagnosis.
2. Choose the suitable investigations and management for these conditions.
3. Display presentation and communication skills publicly, to colleagues.

Values:

1. Work in groups and interact effectively with peers while maintaining group cooperation.

Topics:

1. Introduction
2. Abnormalities of Teeth
3. Cysts of the Oral Cavity
4. Odontogenic Tumors
5. Quiz 1
6. Developmental Disturbances of Oral & Para-Oral Tissues
7. Pulp, Periapical Diseases + Osteomyelitis
8. Bone Diseases
9. Salivary Gland Diseases & Tumors
10. Quiz 2
11. Benign Epithelial Lesions
12. Pre-malignant & Malignant Epithelial Lesions
13. Soft tissue Lesions
14. Oral Infection
15. Revision

Assessment Methods:

Teaching Method:

1. Lecture with interactive discussion.
2. Case-based learning (CBL)
3. In class activity with discussion and feedback
4. Simulation

Evaluation Methods:

1. Quizzes (2) **30%**
2. Assignment **10%**
3. Group project for simulated cases **15%**
4. In class activity **10%**
5. Final didactic **20%**
6. Final CPC **15%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
DPHE 806	**Research Methods and Design**	**2**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Identify indications of different descriptive measures.
2. Recognize different study designs.

Skills

1. Interpret statistics commonly used in the analysis of clinical data and their implications for patient management.
2. Distinguish different study designs when reading an article.
3. Appraise critically the dental literature.
4. Write a scientific research proposal.
5. Display appropriate communication skills with faculty and colleagues.

Values

1. Maintain the responsibilities related to continuing professional development and use a life-long learning philosophy.
2. Work in groups and interact effectively with peers with maintenance of group cooperation.

Topics:

1. Introduction to the course- Overview of Research Study Protocol
2. Research Questions & Research Objectives
3. Review of Literature, Background and Significance + Technical Workshop
4. Fundamentals of In-vitro Research
5. Case report, Case series & Clinical Trials
6. Systematic Review & Meta-analysis
7. Cohort, Case-control, Cross sectional study designs
8. How to write a research proposal
9. Bias, Confounding & Causality
10. Scientific Articles Discussion
11. Presentation of Methods
12. AI and research
13. Qualitative research methods

Assessment Methods:

Teaching Methods:

1. Lecture
2. Discussion group
3. Oral presentation
4. Written Research Proposal
5. Scientific article discussion (Group discussion)

Evaluation Methods:

1. Assignment #1 (Writing Research Questions & Objectives) **5%**
2. Assignment #2 (Writing Background & Significance) **5%**
3. Assignment #3 (Critique 1) **10%**
4. Assignment #4 (Writing Methods section) **5%**
5. Scientific article discussion **5%**
6. Assignment #5 (Critique 2) **10%**
7. Presentation of methods **5%**
8. Quiz **15%**
9. IRB Certificate **5%**
10. Written Research Proposal **20%**
11. Research Proposal Presentation **15%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
END 808	**Oral Microbiology and Immunology and Cariology**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Recognize the principles of oral microbiology, immunology and cariology.
2. Identify the immunological/microbiological principles of periapical and periodontal disease.
3. Describe the principles of diagnostic microbiology.
4. Demonstrate a sound understanding of the impact of systemic diseases on oral health.

Skills

1. Integrate the knowledge gained from oral immunology and microbiology applied topics to enhance diagnosis, treatment prognosis and outcome.
2. Write a topic review on contemporary immunology and microbiology.
3. Communicate effectively with faculty and colleagues at all levels and demonstrate satisfactory behavior during the presentation, including response to discussion and questions.

Values

1. Adopt a life-long learning philosophy and manage time effectively.

Topics:

1. Introduction to oral immunology.
2. Introduction to oral microbiology.
3. Immuno/biology of periapical disease.
4. Oral manifestations of systemic disease and HIV.
5. Diagnostic microbiology.
6. Cariology.
7. Oral biofilm; ecology and architecture.
8. Osteoimmunology of periodontal disease.
9. Contemporary immunology and microbiology topics.

Assessment Methods:

Teaching Methods:

1. Lecture with interactive discussion.
2. Topic presentation with interactive discussion & feedback.
3. Instructional strategies and guidance.
4. Active learning strategy (in-class and out-class activities).

Evaluation Methods:

1. Topic assignment **70%**
2. Topic presentation **30%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
REST 809	**Cariology**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Explain the concept of caries balance and imbalance
2. Discuss the current limitations and future policies to reduce the global burden of oral diseases
3. Explain the mechanisms of action of fluoride in the prevention of dental caries
4. Explain the principles of the International Caries Detection and Assessment System (ICDAS)

Skills

1. Justify the different clinical presentations of the caries lesion
2. Compare the different novel methods for caries detection and diagnosis
3. Correlate the role of diet in causing and preventing dental caries
4. Correlate the properties of dental biofilm and its complex microbial interactions in dental caries
5. Correlate the protective role of saliva with regards to dental caries
6. Contrast the different caries risk assessment protocols
7. Develop caries preventive and management strategies based on caries risk of the patient
8. Appraise the different caries treatment modalities based on conservative principles

Values

1. To join and debate effectively in in-class discussions
2. To display adherence to academic standards when submitting post-seminar assignments

Topics:

1. Introduction to cariology
2. Dental caries as a global health concern
3. Dental caries dynamics
4. Dental caries diagnosis
5. Fluoride
6. The role of diet in dental caries
7. The dental biofilm
8. The role of saliva in the caries process
9. Caries risk assessment models
10. Conservative management of dental caries

Assessment Methods:

Teaching Methods:

1. Seminar
2. Assignments

Evaluation Methods:

1. Discussion participation **30%**
2. Post-seminar assignments **30%**
3. Oral examination **40%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
OMFS 803	**Clinical Pharmacology**	**1**	

Objective:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Understand the fundamental principles of pharmacology
2. Recognize the pharmacotherapeutic agents used for patient care in the dental practice such as pain control, opioids, sedation, local anesthesia, general anesthesia.
3. List the indications, contraindications, adverse effects, and interactions of pharmacotherapeutic agents used in dental practice.

Skills

1. Apply pharmacological knowledge for solving clinical problems by selecting the appropriate drugs for dental procedures and problems.
2. Develop effective communication skills to educate and counsel patients and provide convenient care.

Values

1. Apply patient safety measures when prescribing medications
2. Show commitment and responsibility

Topics:

1. Pharmacology definition and care of drug Dug administration, therapeutic effect, side effect, toxicity, allergy, interaction, dependence, Different routes dosage form, advantages and disadvantages, pharmacokinetics/dynamics.
2. Pain control (Acute pain management) Narcotic analgesics, non-narcotic analgesics
3. Pain control (chronic pain management) Narcotic analgesics, Anti-inflammatory drug
4. Sedatives and hypnotics
5. Anesthesia and Sedation: general anesthesia (Stages), Inhalation, parenteral Basics of Sedation
6. Local and topical anesthesia
7. Chemotherapy: - Antimicrobial, Antibacterial, Antifungal, Antiviral
8. Medically compromised patients: Hypertension, DM, Asthma, Seizure, Congestive Heart failure,
9. Bisphosphonate, Hyperbaric oxygen, Anti-coagulants.
10. Antiseptics & disinfectants (dosage form and indications) Dentifrices toothpaste, Mouth washes and fluoride preparations

Assessment Methods:

Teaching Methods:

1. Lecture
2. Interactive discussion

Evaluation Methods:

1. Formative assessment **60%**
2. Written exam **40%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
DPHE 808	**Public Health Ethics and Law (Elective)**	**1**	

Objective:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Recognize ethical issues in public and oral health practice and research
2. Develop the analytical skills in using ethical values and concepts in public health to construct arguments that are logical, consistent, and defensible in the face of reasoned disagreement and challenge
3. Describe the legal and ethical bases for public health practice and research

Skills

1. Criticize the ethical distribution of health resources

Values

1. Apply ethical decision making for ethical dilemmas in public health practice and research
2. Evaluate ethical and legal dimensions of public health practices and research

Topics:

1. Introduction to public health ethics and history of public health practice
2. Public health research and practice in international settings
3. Resource allocation and priority Setting
4. Disease prevention and control
5. Chronic and infectious disease prevention and health promotion
6. Environmental and occupational public health
7. Vulnerability and Marginalized Populations
8. Health communication ethics
9. The intersection of ethics and law in public health
10. Research ethics

Assessment Methods:

Teaching Methods:

1. Lectures with interactive discussion
2. In class activity with discussion and feedback

Evaluation Methods:

1. In class Exercises or homework Assignments **30%**
2. Quiz **20%**
3. Final written Exam **50%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
REST 829	**Dental Biomaterial (Elective)**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Explain requirements of Biocompatibility
2. Describe fundamental mechanical properties of Biomaterials
3. Discuss the relationship between surface properties of materials to their behavior in the oral cavity.
4. Discuss fundamental properties, structure and classification of Biomaterials including ceramics and dental adhesives.

Skills

1. Discuss the relationship between mechanical and physical properties of materials to their behavior in the oral cavity, and their testing principles to clinical relevance
2. Design a study in the dental biomaterials field.
3. Perform a study involving biomaterials testing.
4. Present a brief manuscript.

Values

1. Implement professional integrity and research ethics.

Topics:

1. Biocompatibility
2. Mechanical Properties
3. Testing of Biomaterials
4. Surface phenomena and Biofilm
5. Adhesion and adhesives
6. Polymers
7. Ceramics
8. Presentation of projects

Assessment Methods:

Teaching Methods:

1. Interactive lecture
2. Interactive lecture/lab demonstration

Evaluation Methods:

1. Assignments **30%**
2. Written Research Report **20%**
3. Project oral presentation **10%**
4. Mid and final Written Exams **15%,25%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
ORD 822	**Practice Management in Orthodontics (Elective)**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. List the essentials for leadership and success in dentistry and in general
2. Define policies and its advantages in management system.
3. Identify the types of management meetings.
4. Identify what are the items that should be in great managers and leaders?
5. Define the parts of human resource management (HRM).
6. Recognize the value of setting SMART objectives leading an organization
7. Describe what is strategic management

Skills

1. Explain the standard cycle or loop of the management process
2. Analyze the difference between short-term and long-term objectives
3. Explain how quality management adds to an organization's goals.
4. Assess any risk management in successful practice
5. Analyze the importance of the role of using Information technology (IT) in successful practice.
6. Explain the objective of financial statements
7. Interpret financial information (the balance sheet, income statement, and cash flow statement).

Values

1. Appreciate the value of being successful dentist in the community
2. Understand and adhere to the rules and regulation of practicing dentistry in Saudi Arabia (private and government sectors)
3. Grasp the Items that should be in great managers
4. Become an effective leader that contributes to a vision of a high-quality health care system.

Topics:

1. Introduction to the course and Item of successful dentist
2. Strategic management
3. Human resource management
4. Quality management
5. Information management
6. Financial management
7. Practice Management Seminar (PMS)
8. Book Review Student presentations

Assessment Methods:

Teaching Methods:

1. Lectures with interactive discussion
2. Seminars/ Student presentations with interactive discussion and feedback
3. In class activity with discussion and feedback

Evaluation Methods:

1. Class participation with feedback **10%**
2. Test-based written exam: Quiz **30%**
3. Oral presentation & discussion using rubric: Final exam as Evaluation of Book review presentations **60%**

Total: 100 Marks

COURSES FROM OTHER FACULTIES

Course Code	Course Title	Credits	Prerequisite
PEDD 831	**Pediatric and Medical Emergencies**	**2**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Explain the etiology, clinical features, and management of common pediatric medical conditions.

Skills

1. Gather and analyze medical history and clinical findings to diagnose pediatric medical conditions.
2. Perform appropriate clinical examination of pediatric patients presenting with systemic or emergency conditions.
3. Demonstrate effective communication with pediatric patients, parents, and multidisciplinary healthcare teams.

Values

1. Work collaboratively showing professionalism, ethical responsibility, and respect for diversity in patient care.

Topics

1. Childhood infections, infectious diseases and immunization
2. Defects in ossification of the skull and the metabolic disorders with bone lesions
3. Normal development, growth and common congenital anomaly.
4. The immune deficiency disease and Allergic Disorders.
5. Diseases of the Blood in Children
6. The Cardiovascular system abnormalities and diseases
7. Gastro-intestinal disease
8. Hepatic disease
9. Renal diseases: Pediatric Nephrology
10. Disorders of the Endocrine Systems
11. Neurology
12. Diagnosis and management of children with neoplasm
13. Management of common pediatric emergencies
14. Oro-facial trauma in infants, children and adolescents
15. Clinical Outpatient sessions

Assessment Methods:

Teaching Methods

1. Lectures with interactive discussion
2. Interactive discussion In clinical sessions with feedback.

Evaluation Methods:

1. Assignment: Topic assignment **20%**
2. Clinical cases Evaluation **40%**
3. Final written Exam **40%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
ANTD 800	Applied Head and Neck Anatomy	2	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge

1. Demonstrate a comprehensive understanding of the anatomical structures of the head and neck as they pertain to dentistry.
2. Understand the anatomical relationships and functions of the facial skeleton, muscles of the face and mastication, the mouth, oropharynx, and larynx.
3. Recognize the importance of blood vessels, lymphatics, and nerve supply in the oral cavity and salivary glands and their clinical significance to the dental practice.
4. Comprehend the impact of head and neck anatomy on the dental treatment planning, outcomes, and interdisciplinary collaboration.
5. Understand the relationships between craniofacial anatomy, dental occlusion, and temporomandibular joint function.

Skills

1. Apply anatomical knowledge to accurately identify and locate structures of the head and neck in clinical practice and radiographic images.
2. Relate anatomical structures to their functional implications in orthodontic treatment planning, occlusion, and facial esthetics.
3. Utilize anatomical principles to analyze and interpret diagnostic information and develop appropriate treatment plans for orthodontic patients.

Values

1. Demonstrate commitment to ethical issues related to patient care.
2. Take responsibility and commitment to the discipline by professional planning for learning, and development.

Topics:

1. The Skull, Scalp & Face
2. The Posterior & Anterior Triangles
3. The Cranial Cavity, the Parotid Glands & the Orbit
4. The Viscera and Thyroid
5. The Vessels & Nerves of the Neck
6. The Muscles of Mastication
7. The Temporal & Infratemporal Fossa
8. The Submandibular Region
9. The Oral Cavity and Tongue
10. The Palate
11. The Pharynx, the Nasal Cavity & the Larynx
12. The Ear
13. The Temporomandibular Joint
14. Tutorial
15. Revision

Assessment Methods:

Teaching Methods:

1. Lectures with interactive discussion
2. Simulation
3. In class activity with discussion and feedback

Evaluation Methods:

1. Test-based written exam: Quiz 1 **10%**
2. Test-based written exam: Quiz 2 **30%**
3. Test-based final written exam **60%**

Total: 100 Marks

Course Code	Course Title	Credits	Prerequisite
EDTD 807	**Medical Education and Clinical Teaching Skills**	**1**	

Objectives:

At the end of this course the postgraduate student should be able to:

Knowledge:

1. Identify the goals and set the objectives for a course during the process of course design.
2. Select an appropriate teaching method that will meet the learning outcomes.

Skills

1. Criticize different methods in information presentation skills.
2. Effectively prepare, apply, and evaluate assessment methods.

Values

1. Appreciate the value of aligning teaching strategies to assessment methods.

Topics:

1. Course introduction
2. Designing a Course/Curriculum
3. Teaching Methods
4. Lecture Preparation
5. Lecture presentation
6. Teaching & Learning in Medicine and Dentistry
7. Principles and Method of Assessments
8. Exam Preparation and practice
9. Exam Evaluation
10. Student seminars

Assessment Methods:

Teaching Methods:

1. Lecture
2. Discussion
3. Seminar presentations

Evaluation Methods:

1. Class participation **5%**
2. Write and submit ILOs **10%**
3. Electronic popup quiz **10%**
4. Seminar presentation **20%**
5. Submit a written assignment on a selected subject in medical education **15%**
6. Final Written Exam **40%**

Total: 100 Marks