





# **Course Specifications**

Course Title:	Clinical Pedodontics-I
<b>Course Code:</b>	PDS 423
Program:	Bachelor of Dental Surgery
Department:	Preventive Dental Sciences [PDS 423]
College:	College of Dentistry
Institution:	Majmaah University

## **Table of Contents**

A. Course Identification	
6. Mode of Instruction (mark all that apply)	3
B. Course Objectives and Learning Outcomes4	
1. Course Description	4
2. Course Main Objective	4
3. Course Learning Outcomes	3
C. Course Content5	
D. Teaching and Assessment9	
Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods	9
2. Assessment Tasks for Students	10
E. Student Academic Counseling and Support11	
F. Learning Resources and Facilities11	
1.Learning Resources	11
2. Facilities Required	11
G. Course Quality Evaluation12	
H. Specification Approval Data12	

## A. Course Identification

1. Credit hours:					
2. Course type					
University College Department Others					
Required Elective					
3. Level/year at which this course is offered:					
. Pre-requisites for this course (if any): PDS322					
5. Co-requisites for this course (if any):					

**6. Mode of Instruction** (mark all that apply)

No	Mode of Instruction	<b>Contact Hours</b>	Percentage
1	Traditional classroom	30	25%
2	Blended	-	-
3	<b>E-learning</b>		-
4	Correspondence		-
5	Other –(Practical- Clinical sessions)	90	75%

**7. Actual Learning Hours** (based on academic semester)

No	Activity	Learning Hours			
Conta	Contact Hours				
1	Lecture	30			
2	Laboratory/Studio				
3	Tutorial				
4	Others (specify) Practical- Clinical sessions	90			
	Total	120			
Other	Other Learning Hours*				
1	Study	40			
2	Assignments	20			
3	Library	20			
4	Projects/Research Essays/Theses	20			
5	Others (specify)	-			
	Total	100			

<sup>\*</sup> The length of time that a learner takes to complete learning activities that lead to achievement of course learning outcomes, such as study time, homework assignments, projects, preparing presentations, library times

### **B.** Course Objectives and Learning Outcomes

#### 1. Course Description

This two-credit hour course consists of two parts; theory and clinical work. The theoretical part (1 credit hour) is designed to provide Dental students with basic knowledge related to Pediatric Dentistry. This course discusses the different aspects of diagnosis and management of dental problems in pre-school age children. Principles of behavior management and anxiety control to deal with children are a major emphasis of this course.

The practical part (1 credit hour, 3 contact hours) provides students with the skills to apply the comprehensive dental care to manage all dental needs of the assigned child patient. Children with age range of 1 to 14 years are usually seen and treated by the students in this course.

#### 2. Course Main Objective

The main purpose of the course is to inform and provide the students with sufficient knowledge in children dentistry and it includes study of examination, diagnosis, management and treatment planning for various dental problems in children from infancy through adolescence.

Following are the plans that are implemented for developing and improving the course:

- Annual review of course by departmental course planning committee
- Updating the course with latest developments in the field using web-based materials.
- Annual review and updating practical sessions with new updates, slides and new preparations.
- Comparison of course topics with equivalent local and international courses.
- By clinical examination and group discussions.
- By increasing the use of practical skills and management of behavior modification in child patients.

3. Course Learning Outcomes

	Aligned PLOs		
1	Knowledge:		
K3.26	Recall the medical, dental and behavioral management concepts	K3	
	needed for the practice of dentistry in children.		
2	Skills:		
S4.5	S4.1 Implement preventive and clinical management strategies of pediatric patients with special emphasis on restorative and surgical procedures.	S4	
S7.10	Demonstrate good skills for clinical examination, diagnosis and treatment planning of different clinical and surgical dental procedures in children.		
3	Competence:		
C3.10	Demonstrate effective communication skills with the children and their families with proper documentation. C3.	C3	

## C. Course Content

No	List of Topics	Contact Hours
	Unit 1 : Introduction, Examination of	
	the Mouth and Other Relevant	
	Structures	
1	<ul> <li>Initial parental contact with the dental office Definition</li> </ul>	1
	<ul> <li>The diagnostic method</li> </ul>	
	<ul> <li>Preliminary medical and dental history</li> </ul>	
	Clinical examination	
	Unit 2 : Behavior management : Part (1)	
	<ul> <li>Definition</li> </ul>	
	<ul> <li>Classification of child behavior</li> </ul>	
2	<ul> <li>Behavior rating scales</li> </ul>	1
	• Fear	
	<ul> <li>Factors affecting child behavior patterns</li> </ul>	
	<ul> <li>Appearance of the dental office</li> </ul>	
	Unit 2 : Behavior management : Part (2)	
3	<ul> <li>Management of different child behavior patterns</li> </ul>	1
3	<ul> <li>Techniques and tools of child behavior managements</li> </ul>	1
	<ul> <li>Physical Restraints</li> </ul>	
	Unit 3: Prevention: Fluorides in	
	pediatric dentistry.	
	<ul> <li>Fluoride administration</li> </ul>	
4	<ul> <li>Technique of application</li> </ul>	1
	<ul> <li>Self-applied topical fluoride applications</li> </ul>	
	<ul> <li>Recommendations for use of topical fluorides</li> </ul>	
	Unit 4: Radiographic techniques in pediatric dentistry	
	<ul> <li>Selection criteria and radiographic examinations</li> </ul>	
	• commonly used radiograph, radiographic techniques and	
5	examinations	1
	• digital receptors for pediatric patients, evaluation of	
	radiographs	
	Unit 5 : Oral habits-1	
	<ul> <li>Definition,</li> </ul>	
6	<ul> <li>Undesirable oral habits in children,</li> </ul>	1
6	Digital sucking	1
	Tongue thrusting	
	• .	
	Unit 5 : Oral habits -2	
	• Bruxism,	
	<ul> <li>Mouth breathing,</li> </ul>	
7	<ul> <li>Lip biting and sucking habit,</li> </ul>	1
	<ul><li>Cheek biting,</li></ul>	
	<ul><li>Self-injurious habit,</li></ul>	
	Nail biting	
8	Unit 6 : Mechanical and Chemotherapeutic home oral hygiene in	-

	pediatric dentistry-1	
	Manual toothbrush,	
	<ul> <li>Powered mechanical plaque removal dentifrices,</li> </ul>	
	• •	
	• Floss, Interproximal Brushes,	
	• End-tufted Brush,	
	<ul> <li>Disclosing agents,</li> </ul>	
	• Tongue scrapers.	
	Oral irrigators	
	Unit 6 : Mechanical and Chemotherapeutic home oral hygiene in	
	pediatric dentistry-2	
	Antiseptic agents,	
	• Essential Oils,	
	<ul> <li>Quaternary Ammonium Compounds,</li> </ul>	
9	• Triclosan,	1
	<ul> <li>Stannous Fluoride, sugar substitutes,</li> </ul>	
	<ul> <li>Age-specific home oral hygiene instructions,</li> </ul>	
	<ul> <li>In-office oral hygiene programs</li> </ul>	
	<b>Unit 7: Space Maintenance in the Primary Dentition: Part (1)</b>	
	<ul> <li>Space loss problems,</li> </ul>	
	• Definition,	
1.0	Band and loop space maintainers,	
10	<ul> <li>Crown and loop space maintainer,</li> </ul>	1
	<ul> <li>Lingual arch space maintainer,</li> </ul>	
	<ul> <li>Nance palatal arch appliance</li> </ul>	
	Trance palatar aren apphanee	
	<b>Unit 7: Space Maintenance in the Primary Dentition: Part (2)</b>	
	<ul> <li>Transpalatal arch appliance</li> </ul>	
	<ul> <li>Distal shoe space maintainer</li> </ul>	
11	<ul> <li>Bonded space maintainer</li> </ul>	1
11	<ul> <li>Glass fiber reinforced composite resin space maintainer</li> </ul>	1
	Removable Space Maintainers	
	<ul> <li>Fixed appliances for anterior space maintenance</li> </ul>	
	Unit 8: Congenital Genetic Disorders and Syndromes	
	Children in dental clinic fit one of three categories,	
	<ul> <li>Ocular anomalies,</li> </ul>	
	<ul> <li>Auricular anomalies,</li> </ul>	
12	<ul> <li>Anomalies of the mouth and oral region,</li> </ul>	1
	<ul> <li>Dental anomalies,</li> </ul>	
	<ul> <li>Dental anomalies,</li> <li>Dentist responsibilities,</li> </ul>	
	<u>*</u>	
	<ul> <li>Some common syndromes in children</li> </ul>	
	Unit 9: Minor Oral Surgery in Children & common pathological	
	conditions	
13	<ul> <li>Minor oral surgery in children</li> </ul>	1
	Common pathological condition in children	

	Unit 10. Dhyamacalagical Management of children (1)	
	Unit 10: Phramacological Management of children (1)	
	• Definition,	
1.4	• Oral sedation,	1
14	• Intra-muscular sedation,	1
	Submucosal sedation,	
	<ul> <li>Intra-venous sedation</li> </ul>	
	Unit 10: Management of children with N2O Inhalation and G.A (2)	
	• Definition,	
	<ul><li>Indication,</li></ul>	
	<ul><li>Contraindication,</li></ul>	
15	<ul><li>Advantages,</li></ul>	1
13	<ul><li>Disadvantages,</li></ul>	1
	<ul><li>Objectives,</li></ul>	
	• Techniques,	
	<ul> <li>Differences between conscious sedation and general anesthesia</li> </ul>	
	Second Semester	
	Unit 1 : Dental trauma : Part (1)	
	Terminologies and definitions	
	<ul> <li>Predisposing and risk factors</li> </ul>	
	Etiology	
16	<ul><li>Epidemiology (Primary)</li></ul>	1
10		1
	• Epidemiology (Permanent) • Ellis and Dayay Classification	
	<ul><li>Ellis and Davey Classification</li><li>WHO Classification</li></ul>	
	• WHO Classification	
	Unit 1 : Dental trauma : Part (2)	
	<ul> <li>Definition</li> </ul>	
17	<ul> <li>Reaction of tooth to trauma</li> </ul>	1
17	<ul> <li>Effects on development of permanent teeth</li> </ul>	1
	Examination and Diagnosis	
	Unit 1 : Dental trauma : Part (3)	
18	<ul> <li>Ellis classification</li> </ul>	1
10	<ul> <li>Apexogenesis</li> </ul>	1
	Apexification	
	Unit 1 : Dental trauma : Part (4)	
	<ul> <li>Crown- Root Fracture</li> </ul>	
	• Root Fracture	
19	<ul> <li>Luxation injuries</li> </ul>	1
	<ul> <li>Avulsion</li> </ul>	
	<ul> <li>Fracture of crown</li> </ul>	
	Unit 1 - Doutel transport Dout (5)	
20	Unit 1: Dental trauma: Part (5)  Monogament of dental trauma in primary tooth	1
20	<ul> <li>Management of dental trauma in primary teeth</li> </ul>	1
	Unit 2 : Treatment of Deep Caries, Vital Pulp Exposure, and Pulpless	
21	Teeth: Part (1)	1
	<ul> <li>Diagnostic aids in the selection of teeth for Vital pulp therapy</li> </ul>	
	C r r r r r r r r r r r r r r r r r r r	1

	Evaluation of treatment prognosis before Pulp therapy	
	Treatment of the deep carious lesion	
	Vital pulp exposure	
	v itai puip exposure	
	Unit 2 : Treatment of Deep Caries, Vital Pulp Exposure, and Pulpless	
	Teeth -2	
	<ul> <li>Vital pulp therapy techniques,</li> </ul>	
22	<ul> <li>Nonvital pulp therapy technique,</li> </ul>	1
	<ul> <li>Various pulp capping materials,</li> </ul>	
	Failures after vital pulp therapy	
	Unit 3 : Crowns in Pediatric Dentistry	
	• Introduction,	
	• Definition,	
23	• Classification,	1
	• Preparation of the tooth,	
	Selection of crown size,	
	<ul> <li>Contouring of the crown</li> </ul>	
	Unit 4: Dental Management of Medically Compromised Patient -1	
24	Hemophilia,	1
Z <del>4</del>	<ul> <li>Viral hepatitis,</li> </ul>	1
	Sickle cell anemia	
	Unit 4: Dental Management of Medically Compromised Patient -2	
	<ul> <li>Acquired immunodeficiency syndrome,</li> </ul>	
25	<ul> <li>Heart Disease,</li> </ul>	1
	■ Thalassaemia,	
	Platelet Disorders	
	<ul> <li>Unit 5: Dental Management of Disabled Children</li> <li>Down syndrome (Trisomy 21 syndrome),</li> </ul>	
	<ul> <li>Learning disabilities</li> </ul>	
	• Fragile-x,	
	<ul><li>Foetal alcohol syndrome,</li></ul>	
26	Autism,	1
20	<ul><li>Cerebral palsy,</li></ul>	1
	<ul><li>Spina bifida and latex allergy,</li></ul>	
	Respiratory diseases,	
	<ul> <li>Hearing loss,</li> </ul>	
	<ul><li>Visual impairment</li></ul>	
	Unit 6: Gingivitis and Periodontal Disease in Children -1	
	Normal gingiva and periodontium,	
27	• Simple gingivitis,	1
-,	<ul> <li>Acute gingival disease,</li> </ul>	_
	<ul> <li>Chronic nonspecific gingivitis</li> </ul>	
	Unit 6: Gingivitis and Periodontal Disease in Children -2	
	Early-Onset Periodontitis,	
20	Prepubertal Periodontitis,	
28	<ul> <li>Localized, Early-Onset Periodontitis,</li> </ul>	1
	Generalized Early-Onset	
	<ul> <li>Periodontitis</li> </ul>	

	Unit 7: Medical Emergencies in Children -1	<b>—</b> — /
	<ul> <li>Introduction,</li> </ul>	
	• Syncope,	
29	<ul> <li>Allergy,</li> </ul>	1
29	<ul> <li>Asthma,</li> </ul>	1
	<ul> <li>Hyperventilation,</li> </ul>	
	<ul> <li>Airway obstruction,</li> </ul>	
	<ul> <li>Seizures</li> </ul>	
	Unit 7: Medical Emergencies in Children -2	
	<ul> <li>LA overdose reactions</li> </ul>	
30	<ul> <li>Thyroid gland dysfunction,</li> </ul>	1
	<ul> <li>Adrenal crisis,</li> </ul>	
	<ul> <li>Insulin shock &amp; Diabetic ketoacidosis</li> </ul>	
	Total	30

## **D.** Teaching and Assessment

## 1. Alignment of Course Learning Outcomes with Teaching Strategies and Assessment Methods

Code	Course Learning Outcomes	Teaching Strategies	<b>Assessment Methods</b>	
1.0	Knowledge			
K3.26	Recall the medical, dental and behavioral management concepts needed for the practice of dentistry in children.	Lectures Clinical sessions	Written exams Clinical exams	
2.0	Skills			
S4.5	Implement preventive and clinical management strategies of pediatric patients with special emphasis on restorative and surgical procedures.	Lecture Clinical sessions	Written exams Clinical exams Case based scenario Assignments	
S7.10	Demonstrate good skills for clinical examination, diagnosis and treatment planning of different clinical and surgical dental procedures in children		Weekly assessment Approved procedures documented in log book	
3.0	Competence			
C3.10	Demonstrate effective communication skills with the children and their families with proper documentation.	Clinical sessions	Weekly assessment Clinical Exams	

#### 2. Assessment Tasks for Students

	Assessment task			Week Due	Proportion of Total Assessment	
1	In Course Assessments 60		Mid-year exam- written		15 <sup>th</sup> week	20%
2		60	Activities	Professional ism	Throughout semester	5%
3		60	U	Quiz	Throughout semester	5%
4			Weekly assessment- Practical		25 <sup>th</sup> week	30%
5	Final exam	Final theory		,	End of semester	20%
6	Tillal Exalli	40	Final practical		End of semester	20%
Tot	tal marks	100			Total►	100%

<sup>\*</sup>Assessment task (i.e., written test, oral test, oral presentation, group project, essay, etc.)

## E. Student Academic Counseling and Support

Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice:

The students would avail consultancy during the displayed office hours (2-4 hours per week)

## F. Learning Resources and Facilities

1.Learning Resources

1.Dear milg Resources	
Required Textbooks	<ul> <li>Dentistry for the Child and Adolescent Ninth Edition - Jeffrey A. Dean, David R. Avery and Ralph E. McDonald, Mosby,ISBN: 978-0323057240</li> <li>Handbook of Pediatric Dentistry 4th Edition Angus C. Cameron and Richard P. Widmer. Elsevier Ltd, ISBN: 978-0-7234-3695-9</li> </ul>

Essential References Materials	<ul> <li>Pediatric dentistry Journals         (International Journal of Paediatric Dentistry; Pediatric Dentistry; European Archives of Paediatric Dentistry; Journal of Indian Society of Pedodontics and Preventive Dentistry and etc., )     </li> </ul>
<ul> <li>http://www.sdl.edu.sa</li> <li>http://www.pubmed.com</li> <li>Electronic material on CD, Web sites.</li> </ul>	
Other Learning	

2. Facilities Required

Item	Resources
Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)	<ul> <li>Lecture rooms should be large enough to accommodate 30 students.</li> <li>Well-equipped per clinical cube suitable for 2-3 students</li> </ul>
Technology Resources (AV, data show, Smart Board, software, etc.)	<ul> <li>One computer, projector, active-board, video set connected to projector.</li> <li>Dental clinic with instruments required to treat Pediatric patient</li> <li>Radiographs: Intra -oral periapical films, Panoramic radiograph, Lateral cephalogram, Anterior Occlusal radiographs and etc</li> </ul>
Other Resources (Specify, e.g. if specific laboratory equipment is required, list requirements or attach a list)	<ul> <li>The following items are needed for the lab practices: thyphodont model, High speed hand piece, and burs</li> <li>Dental clinic including dental unit and supplied materials and instruments.</li> </ul>

**G.** Course Quality Evaluation

Evaluation	Evaluators	<b>Evaluation Methods</b>	
Areas/Issues			
	Students	Course Evaluation Survey	
Effectiveness of teaching and		Quality of Exam Survey	
assessment	Faculty	CLO Mapping with	
		teaching & assessment.	
		Course Blueprinting	
		Grade Analysis	
		Psychometric Analysis	
	Collogues	Grade Verification	
Extent of achievement of	Faculty member / Quality	• Direct assessment	
course learning outcomes	assurance committee	outcome analysis	
		Course report preparation	

Quality of learning resources,	Faculty/Students	•	Academic advising survey Student experience survey
etc			Student experience survey

**Evaluation areas** (e.g., Effectiveness of teaching and assessment, Extent of achievement of course learning outcomes, Quality of learning resources, etc.)

Evaluators (Students, Faculty, Program Leaders, Peer Reviewer, Others (specify)

**Assessment Methods** (Direct, Indirect)

## **H. Specification Approval Data**

Council / Committee	Department council
Reference No.	*****
Date	29.08.2019