

# **Program Structure Template**

**School of Dental Sciences**

**MDS**

**(Pediatric and Preventive Dentistry)**

**SDS0107**

**2021-2024**

## 1.1 Vision, Mission and Core Values of the University

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### Vision of the University

To serve the society by being a global University of higher learning in pursuit of academic excellence, innovation and nurturing entrepreneurship.

### Mission of the University

1. Transformative educational experience
2. Enrichment by educational initiatives that encourage global outlook
3. Develop research, support disruptive innovations and accelerate entrepreneurship
4. Seeking beyond boundaries

### Core Values

1. Integrity
2. Leadership
3. Diversity
4. Community

## 1.2 Vision, Mission and Core Values of the School

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### **Vision of the School**

To serve the society by being a global center in pursuit of academic and professional excellence in the field of dentistry.

### **Mission of the School**

1. Creating a stimulating and flexible learning environment amongst the faculty and students
2. Strongly promoting research, innovation, clinical excellence
3. Promote and inculcate ethical values and continued betterment in the dental profession and in all facets of life.

### **Core Values**

1. Integrity
2. Leadership
3. Diversity
4. Community

### 1.3 Program Educational Objectives (PEO)

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Program educational objectives are broad statements that describe the career and professional accomplishments that the program is preparing graduates to achieve.

PEO1: Be able to provide both primary and comprehensive, preventive and therapeutic oral health care including interceptive orthodontics for infants, children and adolescent.

PEO2: Be able to instill a positive attitude and behaviour in children towards oral health.

PEO3: Be able to guide and counsel the parents/guardian in regards to various treatment modalities including different facets of preventive dentistry.

PEO4: Be able to manage and treat the physically and mentally challenged / disabled children effectively and efficiently, tailored to the needs of individual requirement and conditions.

PEO5: Maintain high standard of professional ethics and conduct and apply these in all aspects of professional life.

### 1.3.3 Program Outcomes (PO's)

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**PO1:** Demonstrate an in- depth art and science of pediatric dentistry.

**PO2:** Provide preventive and therapeutic oral health care for infants and children through adolescence including those with special health care needs

**PO3:** Employ pediatric dental procedures and behavioral management techniques in Ambulatory and hospital settings.

**PO4:** Work collaboratively with clinicians, parents and other medical specialties advocating for the health of the child patient.

**PO5:** Execute a research project based on a thorough knowledge of literature, data collection and analysis.

**PO6:** Maintain high standard of professional ethics and conduct and apply these in all aspects of professional life.

**PSO1:** Adequate knowledge of scientific foundations on which pediatric dentistry is based which includes growth and development, structure and function of the teeth, mouth and jaws and associated tissues both in health and disease.

**PSO2:** To prepare a student who is proficient in providing preventive and therapeutic oral health care for infants and children through adolescence including those with special health care needs in institution, private or public health settings.

**PSO3:** Be able to instill a positive attitude and behaviour in children towards oral health and understand the principles of prevention and preventive dentistry right from birth to adolescence.

**PSO4:** Be able to guide and counsel the parents in regards to various treatment modalities.

**PSO5:** Acquire skill to prevent and manage complication if encountered and to carry out required investigative procedures and ability to interpret laboratory findings.

**Program Structure Template  
 School of Dental Sciences  
 Master of Dental Surgery (MDS)  
 Batch: 2021-2024**

S. No.	Paper ID	Subject Code	Subjects	Teaching Load			Type of Course <sup>1</sup> : 1. CC 2. AECC 3. SEC 4. DSE
				L	T	P	
<b>THEORY SUBJECTS</b>							
1.	MDS307	MDS307	Pediatric & Preventive Dentistry	134	-	-	CC
<b>Practical/Viva-Voce/Jury</b>							
2.	MDS307	MDS307	Pediatric & Preventive Dentistry	-	-	4187	CC
<b>TOTAL CREDITS</b>							NA

## 2.1 Template A1: Syllabus for Theory Subjects

<b>CO</b>		<b>SCHOOL OF DENTAL SCIENCES</b>	<b>Batch: 2021-2024</b>
<b>Program:</b>		<b>MASTER OF DENTAL SURGERY- PEDIATRIC &amp; PREVENTIVE DENTISTRY</b>	
1	Course Code	MDS307	
2	Credits	NA	
3	Contact Hours (L-T-P)	134-0-4187	
4	Course Type	Compulsory (Core)	
5	Course Objective	<ol style="list-style-type: none"> <li>1. Be able to provide both primary and comprehensive, preventive and therapeutic oral health care including interceptive orthodontics for infants, children and adolescent.</li> <li>2 Be able to instill a positive attitude and behaviour in children towards oral health and be able to guide and counsel the parents/guardian in regards to various treatment modalities including different facets of preventive dentistry.</li> <li>3 Be able to manage and treat the physically and mentally challenged / disabled children effectively and efficiently, tailored to the needs of individual requirement and conditions.</li> <li>4 Maintain high standard of professional ethics and conduct and apply these in all aspects of professional life.</li> </ol>	
6	Course Outcomes	<p><b>CO307.1.1-</b> Student should be able to understand applied Anatomy, genetics, Applied Physiology, Applied Pathology, Nutrition, Dietics, Growth &amp; Development, Cariology and Fluoride.</p> <p><b>CO307.1.2-</b> Student will be get acquainted with Dental health concepts, Effects of civilization and environment, Dental Health delivery system, Public Health measures related to children along with principles of Pediatric Preventive Dentistry and to develop an attitude of counselling in Paediatric Dentistry</p> <p><b>CO307.2.1-</b> Student should be competent to treat dental diseases which are occurring in child patient and should be able to manage to repair and restore the lost/ tooth structure to maintain harmony between both hard and soft tissues of the oral cavity.</p> <p><b>CO307.2.2-</b> Student should be able to manage the disabled children effectively and efficiently, tailored to the needs of individual requirement and conditions.</p> <p><b>CO307.2.3-</b> Student should be able to acquire skills in managing efficiency life threatening condition with emphasis on basic life support measure.</p> <p><b>CO307.3.1-</b> Student should able to understand the principles of</p>	

		<p>prevention and preventive dentistry right from birth to adolescence</p> <p><b>CO307.3.2</b>-Student should able to guide and counsel the parents in regards to various treatment modalities including different facets of preventive dentistry</p> <p><b>CO307.4.1</b>-For a given case, the student after a critical assessment should able to adopt new methods and techniques of Paediatric dentistry that is developed time to time, based on scientific researches, which are in the best interest of the child and patient.</p> <p><b>CO307.4.2</b>-Student should able to respect child patient's rights and privileges, including child patient's right to information and right to seek a second opinion.</p>
7	Course Description	Paediatric and Preventive Dentistry deals with prevention and treatment of oral and dental ailments that may occur during childhood. The objective of the post-graduate training is to train a student so as to ensure higher competence in both general and special area of interest and prepare him or her for a career in teaching, research and speciality practice.
8	Outline syllabus	
	<b>MDS-307.A</b>	<b>Unit A Applied basic sciences</b>
	MDS-307.A1	Unit A Topic 1 Applied anatomy and genetics
	MDS-307.A2	Unit A Topic 2 Applied physiology, pathology, microbiology, nutrition and diatics
	MDS-307.A3	Unit A Topic 3 Dental plaque
	<b>MDS-307.B</b>	<b>Unit B Growth and development, child psychology and behaviour management, child abuse and neglect.</b>
	MDS-307.B1	Unit B Topic 1 Growth and development of prenatal and postnatal development of craniofacial structures.
	MDS-307.B2	Unit B Topic 2 Development and classification of behaviour, personality, intelligence in children, theories of child psychology, stages of psychological child development

MDS-307.B3	Unit B Topic 3	Behavioral management- pharmacological and non pharmacological method, child abuse and neglect.
<b>MDS-307.C</b>	<b>Unit C Clinical pedodontics</b>	
MDS-307.C1	Unit C Topic 1	Case history recording, setting up of pedodontic and preventive dentistry clinic dental radiology related to paediatric dentistry.
MDS-307.C2	Unit C Topic 2	Paediatric operative dentistry and endodontics, dental materials, interceptive orthodontics, oral habits , traumatic injuries in children .
MDS-307.C3	Unit C Topic 3	Deep sedation and general anaesthesia in pediatric dentistry, oral manifestation of systemic condition in children and their management, management of minor oral surgical procedures in children, pediatric medicine and clinical pathology, congenital abnormalities in children ,dental emergencies in children and their management, gingival and periodontal diseases in children and their management.
<b>MDS-307.D</b>	<b>Unit D Preventive Pedodontics</b>	
MDS-307.D1	Unit D Topic 1	Preventive and community dentistry as applied to paediatric dentistry, preventive pedodontics, fluorides, comprehensive infant oral health care/comprehensive

	MDS-307.D2	Unit D Topic 2			cleft care, cariology. Dental health education and school dental health programmes, epidemiology.					
	MDS-307.D3	Unit D Topic 3			Principles of biostatistics and research methodology and understanding of computers and photography.					
	<b>MDS-307.E</b>	<b>Medically compromised child, prosthetic consideration in paediatric dentistry, emerging concepts in pediatric dentistry.</b>								
	MDS-307.E1	Medically compromised child.			Medically compromised child.					
	MDS-307.E2	Prosthetic consideration in paediatric dentistry			Prosthetic consideration in paediatric dentistry					
	MDS-307.E3	Emerging concepts in pediatric dentistry.			Emerging concepts in pediatric dentistry.					
<b>1</b>	<b>Course evaluation</b>	Attendance			Minimum 75% is Needed for both theory and clinical practical					
		Quizzes			Taken in every 2 months					
		Presentations			Seminars, Journal clubs, Case Presentations, Thesis and Library Dissertation Presentation					
		Any Other			Project based learning, short studies, Discussions, Assignments					
		End Term examination			700 Marks			Theory		1 <sup>st</sup> year – 100 marks
			Practical						3 <sup>rd</sup> year - 300 marks	
<b>2</b>	Text book/s*	SR.	Author	Title						
		1	Pinkham, JR	Pediatric Dentistry infancy through adolescence						
		2	Mc Donald, RE	Dentistry for the child and adolescent						
		3	Ghai, OP	Ghai essential paediatrics						
		4	Goran Koch	Pedodontics Clinical Approach						

	5	Welbury	Pediatric Dentistry
	6	Cameron,Angus	Handbook of pediatric dentistry
	7	Stephen Wei	Pediatric Dentistry Total Patient Care
	8	Curzon,MEJ	Kennedy's Pediatric Operative Dentistry
	9	Stewart	Pediatric Dentistry
	10	Mathewson,RJ	Fundamentals of pediatric dentistry
	11	Pinkham,JR	Pediatric Dentistry
	12	Nikiforuk	Understanding Dental Caries Vol 1
	13	Scully,Crispian	A colour atlas of orofacial health: Diseases in children and adolescents
	14	Welburg,Richards	Paediatric dentistry
	15	Nikiforuk	Understanding Dental Caries Vol 2
	16	JJ.Murray& Rug-Gunn	Fluorides in Caries Prevention
	17	Fejerskov& Burt	Fluorides in Dentistry
	18	Fejerskov&Thylstrup	Text book of Clinical Cariology
	19	Mathewson	Fundamentals of Pediatric Dentistry
	20	NewBurn	Cariology
	21	Marwah,Nikhil	Comprehensive Pediatric Dentistry
	22	Tandon,Shobha	Textbook of pedodontics
	23	Chadwick,BL	Child Taming : How to manage children in dental practice
	24	Ripa	Management of Dental Behaviour in children

		25	Shearer	Treatment planning in primary dental care
		26	Gutmann,James I	Problem solving in endodontics
		27	Kaban,Leonard B	Pediatric oral and maxillofacial surgery
		28	Kennedy's & Curzon	Pediatric operative dentistry
		29	Koch,Goran	Pediatric dentistry : A clinical approach
		30	Walker,W.allan	Nutrition in pediatrics
		31	Casamassimo,Pau I S	Pediatric dentistry infancy through adolescence
		32	Sanger,Roger G	Clinical management of child abuse and neglect
		33	Wright,Gerald Z	Behaviour management in dentistry for children
		34	Finn	Clinical pedodontics
		35	Muthu,MS	Pediatric dentistry : Principles and practices
		36	Cameron,Angus C	Hand book of pediatric dentistry
		37	Dean.Jeffery A	Mc Donald and Avery's dentistry for the child and adolescent
		38	Joseph Sim	Minor tooth movement in children
<b>3</b>	Other Referenc es			TED learning EBSCOHST Various scientific articles from various sources