

# **Program Structure Template**

**School of Dental Sciences**  
**MDS**  
**(Master of Dental Surgery)**  
**Periodontology**

**SDS0105**  
**2021-2024**

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

### **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**

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

### **Core Values**

Integrity  
Leadership  
Diversity  
Community

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

### **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**

Creating a stimulating and flexible learning environment amongst the faculty and students

Strongly promoting research, innovation, clinical excellence

Promote and inculcate ethical values and continued betterment in the dental profession and in all facets of life.

### **Core Values**

Integrity

Leadership

Diversity

Community

### 1.3 Programme Educational Objectives (PEO)

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

**PEO1:** Knowledge of etiology, pathophysiology, diagnosis and management of periodontal and peri-implant diseases.

**PEO2:** Knowledge of interrelationship between periodontal diseases and systemic conditions

**PEO3:** Recognize conditions that may be the outside the area of Periodontology and Oral Implantology and refer them to the concerned specialist

**PEO4:** Motivate and educate the community regarding periodontal diseases, its prevention and consequences if not treated

**PEO5:** Update knowledge and enhance skills by attending courses, conferences, seminars and workshops pertaining to Periodontology and Oral Implantology

**PEO6:** Carry out research in both basic and clinical aspects of Periodontology and Oral Implantology with the aim of publishing or presenting the work at various scientific gatherings.

**PEO7:** Skills in taking a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a diagnosis of various periodontal and peri-implant diseases

**PEO8:** Skill in carrying out epidemiological surveys to assess incidence and prevalence of various periodontal and peri-implant diseases in Indian population region wise.

**PEO9:** Acquire adequate skills and competence in performing various non- surgical and surgical procedures independently as required in the specialty of Periodontology and Oral-Implantology

**PEO10:** Apply high moral and ethical standards in all aspects of clinical practice and while carrying out human or animal research

### 1.3.3 Program Outcomes (PO's)

**PO1:Knowledge:** Possess knowledge of etiology, pathophysiology, diagnosis and management of periodontal and peri-implant diseases. In addition, the candidate should understand interrelationship between periodontal diseases and systemic conditions

**PO2:Patient Management:** The candidate should be able to take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a diagnosis of various periodontal and peri-implant diseases. The candidate should be competent in performing various non- surgical and surgical procedures independently as required in the specialty of Periodontology and Oral-Implantology

**PO3:Periodontist and Community:** The candidate should be able to motivate and educate the community regarding periodontal diseases, its prevention and consequences if not treated.He/ She should be able to carry out epidemiological surveys to assess incidence and prevalence of various periodontal and peri-implant diseases in Indian population region wise.

**PO4: Communication Skills:**The candidate should be able to communicate effectively with the dental/periodontal community such as being able to make effective presentations and documentation in various conferences and seminars.

**PO5:Ethics:** The candidate should adopt ethical principle in all aspects of treatment modalities and human or animal research. Professional honesty and integrity should be fostered. The candidate should be humble, accept his/her limitations of knowledge and skill and ask for help from colleagues when needed.

**PO6:Life-long Learning:** The candidate should be able to carry out research in both basic and clinical aspects of Periodontology and Oral Implantology with the aim of publishing or presenting the work at various scientific gatherings and update knowledge and enhance skills by attending various courses, conferences, seminars and workshops

**PSO1:** Diagnosis and treatment planning of periodontal problems, Recognition of medically compromised patients, their referral to physician for opinion or consent and carry out their periodontal treatment

**PSO2:** Non-surgical periodontal procedures such as hand and ultrasonic scaling and root planing, local drug delivery, occlusal adjustment and splints, Oral hygiene instructions using various oral hygiene aids, Supportive Periodontal therapy

**PSO3:** Surgical periodontal procedures such as curettage, gingivectomy and flap surgery, osseous grafts, GTR, Periodontal Plastic and Esthetic Surgical Procedures

**PSO4:** Advanced periodontal treatment procedures such as dental implants, dental lasers and use of biologic mediators like PRF and PRP

**PSO5:** Handling medical emergencies and basic life support

**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: 1. CC 2. AECC 3. SEC 4. DSE
				L	T	P	
<b>Theory Subjects</b>							
1.	MDS302	MDS302	Periodontology	L 132	T -	P -	CC
<b>Practical/Viva-Voce/Jury</b>							
2.	MDS302	MDS302	Periodontology	L -	T -	P 4188	CC
<b>TOTAL CREDITS</b>							NA

## 2.1 Template A1: Syllabus

<b>School:</b>		<b>School of Dental Sciences</b>
<b>Program:</b>		<b>Master of Dental surgery (Periodontology)</b>
<b>Batch:</b>		<b>2021-2024</b>
1	Course Code	302
2	Credits	NA
3	Contact Hours (L-T-P)	132-0-4188
4	Course Type	Compulsory (CORE)
5	Course Objective	<ol style="list-style-type: none"> <li>1. Knowledge of etiology, pathophysiology, diagnosis and management of periodontal and peri-implant diseases.</li> <li>2. Knowledge of interrelationship between periodontal diseases and systemic conditions</li> <li>3. Recognize conditions that may be the outside the area of Periodontology and Oral Implantology and refer them to the concerned specialist</li> <li>4. Motivate and educate the community regarding periodontal diseases, its prevention and consequences if not treated</li> <li>5. Update knowledge and enhance skills by attending courses, conferences, seminars and workshops pertaining to Periodontology and Oral Implantology</li> <li>6. Carry out research in both basic and clinical aspects of Periodontology and Oral Implantology with the aim of publishing or presenting the work at various scientific gatherings.</li> </ol>
6	Course Outcomes	
	302.1	<ul style="list-style-type: none"> <li>● CO302.1.1 Should have an understanding on the structural anatomy and biology of the periodontium and be familiar with the biochemical, microbiologic and immunologic genetic aspects of periodontal pathology</li> <li>● CO302.1.2 Should understand the clinical and biological factors to be considered in the appropriate use of antimicrobial drugs and be aware of the contemporary principles and practices of laboratory diagnostic techniques and interpretation of laboratory reports.</li> <li>● CO302.1.3 Should have a basic knowledge on research methodology, biostatistics and be able to apply it in various research projects as well as dissertations.</li> </ul>



	302.2	<ul style="list-style-type: none"> <li>● CO302.2.1 Should have a sound knowledge of the normal structure of the periodontium and etiopathogenesis of periodontal diseases and be able to apply it in diagnosing and deciding treatment of various periodontal diseases</li> <li>● CO302.2.2 Should be able to record indices and plan out epidemiological survey to assess the prevalence and incidence of various gingival and periodontal diseases in the Indian Population</li> </ul>
	302.3	<ul style="list-style-type: none"> <li>● CO302.3.1 Should be able to record proper clinical history, perform thorough intra-oral and extra-oral examination, advise essential diagnostic procedures and interpret them to come to a reasonable diagnosis</li> <li>● CO302.3.2 Should develop knowledge and skill of various non-surgical and surgical periodontal therapies available for treatment of periodontal diseases including an updated knowledge on the recent advancements and be able to effectively educate and motivate the patient regarding periodontal maintenance after treatment</li> <li>● CO302.3.3 Should develop knowledge and skill in the science and practice of oral implantology including Implant Maintenance and diagnosis and treatment of peri-implant complications</li> </ul>
	302.4	<ul style="list-style-type: none"> <li>● CO302.4.1 Should adopt ethical principles in all aspects of treatment modalities and scientific research, adopt continuous learning by attending conferences and workshops, demonstrate evaluative and judgment skills in patient referral and be able to handle medical emergencies arising in periodontal practise including providing Basic Life Support</li> </ul>
7	Course Description	Periodontology is the science dealing with the health and disease of the investing and supporting structures of the teeth and oral mucous membrane. The objective of the post-graduate training is to train a student so as to ensure higher competence in both general and specialized areas, and prepare him or her for a career in teaching, research and speciality practice with a high degree of clinical proficiency in the field of Periodontology and Oral Implantology.
8	Outline syllabus	
	<b>Unit A</b>	<b>Applied Basic Sciences</b>
	Topic 1	Applied Anatomy including Normal Periodontal structure, Physiology and Biochemistry
	Topic 2	Applied Pathology and Microbiology and Pharmacology
	Topic 3	Applied Research Methodology and Biostatistics

	<b>Unit B</b>	<b>Etiopathogenesis of Periodontal Diseases</b>			
	Topic 1	Etiology, Epidemiology and Risk Factors of Periodontal Diseases			
	Topic 2	Pathology, Microbiology and Immunology of Periodontal Diseases			
	Topic 3	Relationship of Periodontal Diseases with systemic diseases			
	<b>Unit C</b>	<b>Clinical and Therapeutic Periodontology and Oral Implantology</b>			
	Topic 1	Gingival and Periodontal Diseases			
	Topic 2	History, Examination, Diagnosis, Prognosis and Treatment Planning			
	Topic 3	Non-Surgical and Surgical Periodontal Therapy including Recent advances in surgical Techniques and Supportive Periodontal Therapy			
	Topic 4	Biological, Clinical and Surgical aspects of Dental Implants including Diagnosis and Treatment of peri-implant complication sand Implant Maintenance			
	Topic 5	Management of Medical Emergencies in Periodontal Practice including Basic Life Support			
	<b>Unit D</b>	<b>Long Essay</b>			
	Topic 1	Applied Basic Sciences			
	Topic 2	Etiopathogenesis of Periodontal Diseases			
	Topic 3	Clinical and Therapeutic Periodontology and Oral Implantology including Management of Medical emergencies			
9	Attendance	75% Theory and Practical each			
10	Presentation	Seminars, Journal Clubs, Clinical Case Presentations, Dissertation Presentation, Library Dissertation			
11	Any Other	Short Studies, Inter-Departmental Research, Discussions and Demonstrations, Assignments			
12	Mode of examination	Theory//Practical/ Viva voce and Pedagogy			
	Weightage Distribution	700 Marks		1 <sup>st</sup> Year	3 <sup>rd</sup> Year
			Theory	100 Marks	300 Marks
			Practical	-	200 Marks
			Viva voce & Pedagogy	-	100 Marks
13	Text book/s*	<ul style="list-style-type: none"> <li>● Carranza's Clinical Periodontology - Newman, Takei Klokkevold, Carranza</li> <li>● Clinical Periodontology and Implant Dentistry – Lang, Lindhe</li> <li>● Contemporary Implant Dentistry – Misch</li> <li>● Periodontal Medicine - Rose, Mealey, Genco</li> <li>● Textbook of Preventive and Social Medicine – Park</li> <li>● Atlas of cosmetic and Reconstructive Periodontal surgery - Cohen</li> </ul>			
14	Other References	<ul style="list-style-type: none"> <li>● Journal of Clinical Periodontology</li> </ul>			

	<ul style="list-style-type: none"><li>● Journal of Periodontal Research</li><li>● Periodontology 2000</li><li>● Journal of Periodontology</li><li>● International Journal of Periodontics and Restorative Dentistry</li><li>● Journal of Oral Implantology</li><li>● EBSCO Host</li></ul>	
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