

PROGRAM SPECIFICATIONS

BACHELOR'S DEGREE OF DENTISTRY (BDS)

2022 / 2023



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A. Basic Information:

A.1. Program Identification:

Program Title: - Bachelor's Degree of Dentistry (BDS) **Awarded Degree:** Bachelor's Degree of Dentistry (BDS) **Professional Occupation:** General Dental Practitioner (GDP)

Institute / Faculty: Deraya University / Faculty of Dentistry

Program Type: Single

☐ Double

☐ Multiple

Reference Standards: National Academic Reference Standards (NARS), 2009

Duration: 5 academic years (10 Semesters)

Internship program for one year (12 months) to get the

license to practice

190 Credit Hours **Total Number of Credit Hours:**

Program Language: English

Program Commencement: Academic year 2020 / 2021

Coordinator: Vice Dean for Academic & Student's Affairs

Assistant Coordinator: External Evaluator:

A.2. Introduction:

As an addition to the comprehensive vision of Deraya University to give high quality educational and health care services to Al Minia and neighboring governates of Upper Egypt, DUM proposed to establish the Faculty of Dentistry as a new member of its health sciences schools.

Faculty of Dentistry designed this program with a study plan that help the enrolled students in developing and continuously improving the required dental clinical skills with sound medical background. As the program is tailored to meet the community oral and dental health needs as well as focusing on the prevention of oral and dental diseases, the enrolled students will be graduated with distinguished competency to provide the required community dental health care with maximum excellency and safety.

The curriculum is set to entail a distinguished up to date teaching and learning methodologies that emphasis on critical thinking and problem solving to promote a continuous selfdirect learning. Laboratory practical sessions use the most updated technologies in dental education including models, simulators, and different IT audio visual aids. Clinical training either within the faculty clinics or other medical/dental affiliated institutions in different clinical dental specialties is focusing in exposing the students to different oral and dental problems in addition to designing and performing efficiently and competently different treatment plans. Both laboratory and clinical training is under complete supervision of distinguished faculty staff members



B. PROFESSIONAL INFORMATION:

B.1. Program Mission:

Ensuring a conductive environment for the provision of both efficient and effective dental health care services and high-quality learning experiences in accordance with national and international standards and quality assurance. Fostering continuous education and development as well as encouraging research and innovation to help address future global challenges and delivering dental health care service to the community with maximum excellency and safety

B.2. Program Objectives:

- 1. Introducing a national cadre of general dental practitioners with high-quality professional qualifications and clinical competencies, as well as principles derived directly from community values
- 2. Providing a comprehensive multilevel program that applies the highest quality standards in education and training, including the best teaching methodologies, to achieve national and international standards for the academic accreditation of the faculty's scientific degrees
- 3. Enabling graduates to meet the demands of the dental labour market in various specialties with special focus on continuing education and life-long learning
- 4. Enabling graduates to develop ethical professional practice including compassion, tolerance, responsibility, and integrity through providing comprehensive dental health care services in integrated dental clinics for a wide range of patients
- 5. Addressing community oral health needs and considering community-based oral health promotion
- 6. Strengthening strategic partnerships through secure collaboration channels to enable constructive cooperation and the exchange of scientific experiences with national and international scientific institutions

B.3. Graduate Attributes:

According to (NARS 2009), program graduates should be able to:

- 1. Deliver independently oral health care services within the scope of general dentistry.
- 2. Provide ethical professional practice including compassion, empathy, integrity, responsibility and tolerance.
- 3. Provide comprehensive practice management encompassing patient assessments, and maintain patient's records in complete and accurate forms.
- 4. Communicate effectively to develop a mature, sensitive and caring relationship with their patients.
- 5. Respond to socio-economic aspects of different communities and engage effectively in community services.
- 6. Maintain a safe and infection-controlled environment.
- 7. Realize the importance of lifelong learning and strive for continuous professional education.
- 8. Recognize the various features of medico-legal aspects of the dental profession.



- 9. Recognize the limitation of their current knowledge and clinical abilities and realize the need for proper referral.
- 10. Evaluate and respond to ongoing dental technology.

B.4. Program Learning Outcomes:

A. Kı	nowledge & Understanding:
A.1.	 Explain how the body functions – basic and biomedical sciences drawing on disciplines as follows: Anatomy and cell biology, physiology and biochemistry Genetics Human development Microbiology, pathology, human health and diseases including oral and para-oral diseases Disease and health epidemiology and prevention Pharmacology Medical emergencies
A.2.	Distinguish and relate the behavioral sciences and the principles of communication
A.3.	Discuss and express law and ethics and professionalism based on: The development of dentistry as a profession Informed consent procedures Clinical governance in dentistry
A.4.	Summarize and indicate clinical techniques and procedures relative to the practice of dentistry including: • Principles of recording oral conditions and evaluating data • Infection control in the dental clinic • Prevention of oral diseases • Medical & therapeutics • Surgical approaches in the treatment of oral diseases • Restorative care
A.5.	Identify and describe patient investigations in dental care including: How to take a history How to use special tests How to make a diagnosis How to develop treatment plans
A.6.	Model and value the structure and functions of the health care and oral health care team including: • Health care system • Practice management



B. Intellectual Skills:

- B.1. Apply and critique clinical reasoning, decision making, and judgment using evidence-based knowledge drawing on:
 - Problem recognition skills, for example;
 - Disease identification
 - Differential diagnosis
 - Problem solving in dental care, for example;
 - Pain and pain control
 - Ensuring patient acceptance of care
 - Critical thinking, for example;
 - Analysis of the literature using contemporary electronic methods
 - Recognize evidence-based approaches
- B.2. Analyze patient investigations including:
 - Taking a patient history
 - Using special tests for example;
 - Radiography
 - Biopsy techniques
 - Dental caries detection methods
 - Making a diagnosis
 - Developing a treatment plan

C. Professional & Practical Skills:

- C.1. Capable for professional application of reliable information technology resources e.g.
 - Analysis of data,
 - Presentation of reports
 - Patient electronic filing,
 - E-learning resources
- C.2. Calculate numerical measurements and indices of different clinical dental techniques
- C.3. Apply different body functions in performing:
 - Preparing teeth for different dental treatments
 - Probing hard and soft tissues
 - Appropriate use of dental instruments, devices and materials
 - Dental procedures involving:
 - Fine motor control with high level tactile sense of both hands
 - Carrying out treatments in three dimensions, operating directly and indirectly using mirror images
 - Manipulating environment to increase visual perception during dental practice

D. General & Transferable Skills:

- D.1. Communicate professionally and efficiently with verbal and non-verbal communication with:
 - Patients, colleagues, administrators, and faculty members



	Members of their dental team and other health care workers
D.2.	 Improve effectively self-management and development e.g. Demonstrate time and resource management, Respect diversity, Observation / preservation of work-place integrity, Evaluate capacity to adapt to change, Develop a personal portfolio and encouraging others to so,etc.
D.3.	 Behave and practice in professional conduct e.g. Team-work, Flexibility to respond to patient and community demands, Respect to ethical and legal issuesetc.
D.4.	Participate in different professional and community bodies
D.5.	Plan, implement and evaluate community oral health-related programs

B.5. Matrix 1: Alignment of Program Objectives with Program Mission:

MISSION STATEMENT	PROGRAM OBJECTIVES					
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6
- Efficient and effective dental health	✓	✓	✓			
care services and high-quality						
learning experience						
- Fostering continuous education as			✓			✓
well as and encouraging innovation						
- Delivering dental health care service			✓	✓	✓	
with maximum excellency and safety						
- Ensuring a conductive environment				✓		

B.6. Matrix 2: Alignment of Program Objectives with Program Learning Outcomes:

LEARNING OUTCOMES	PROGRAM OBJECTIVES					
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6
A.1		✓				
A.2	✓					
A.3	✓					
A.4		✓	✓			
A.5		✓		✓		
A.6					✓	
B.1	✓	✓	✓	✓		
B.2		✓		✓		



LEARNING OUTCOMES	PROGRAM OBJECTIVES						
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6	
C.1		√	√	√		√	
C.2		✓	✓				
C.3	✓	✓	✓	✓			
D.1	✓			✓	✓	✓	
D.2	✓		✓		✓	✓	
D.3	✓		✓	✓	✓		
D.4			✓	✓	✓	✓	
D.5					✓		

B.7. Matrix 3: Alignment of Program Objectives with Graduate Attributes:

GRADUATE ATTRIBUTE		PROGRAM OBJECTIVES					
		PO-1	PO-2	PO-3	PO-4	PO-5	PO-6
1.	Deliver independently oral health care services within the scope of general dentistry.	√	√				
2.	Provide ethical professional practice including compassion, empathy, integrity, responsibility and tolerance.		√		√		
3.	Provide comprehensive practice management encompassing patient assessments, and maintain patient's records in complete and accurate forms.	√	√				
4.	Communicate effectively to develop a mature, sensitive and caring relationship with their patients.				√		
5.	Respond to socio-economic aspects of different communities and engage effectively in community services.	√				✓	
6.	Maintain a safe and infection-controlled environment.	√	√				
7.	Realize the importance of lifelong learning and strive for continuous professional education.			√			
8.	Recognize the various features of medico-legal aspects of the dental profession.		√	√	√		
9.	Recognize the limitation of their current knowledge and clinical		√	√			√



GRADUATE ATTRIBUTE	PROGRAM OBJECTIVES					
	PO-1	PO-2	PO-3	PO-4	PO-5	PO-6
abilities and realize the need for						
proper referral.						
10. Evaluate and respond to ongoing		✓	√			✓
dental technology.						

B.8. Matrix 4: Alignment of Program Mission with (NARS 2009):

NARS 2009	MISSION STATEMENT						
	- Efficient and	- Fostering	- Delivering	- Ensuring a			
	effective	continuous	dental health	conductive			
	dental health	education as	care service	environment			
	care services	well as and	with				
	and high-	encouraging	maximum				
	quality	innovation	excellency				
	learning		and safety				
	experience						
1. GRADUATE ATTRIBUATE							
1.1. Deliver independently	✓	✓	✓				
oral health care services							
within the scope of general							
dentistry							
1.2. Provide ethical				✓			
professional practice							
including compassion,							
empathy, integrity,							
responsibility and tolerance.				,			
1.3. Provide comprehensive	√		✓	✓			
practice management							
encompassing patient							
assessments, and maintain							
patient's records in							
complete and accurate forms.							
1.4. Communicate				√			
				•			
effectively to develop a mature, sensitive and caring							
relationship with their							
patients.							
1.5. Respond to socio-		√	√	√			
economic aspects of		·	•	,			
different communities and							
engage effectively in							
community services.							
1.6. Maintain a safe and	✓		✓				
infection-controlled							
environment.							
1.7. Realize the importance		✓		✓			
The state of the s							



NARS 2009	Mission Statement						
	- Efficient and effective dental health care services and high-quality learning	- Fostering continuous education as well as and encouraging innovation	- Delivering dental health care service with maximum excellency and safety	- Ensuring a conductive environment			
CIC I and I and I and I are	experience						
of lifelong learning and strive for continuous professional education.							
1.8. Recognize the various features of medico-legal aspects of the dental profession.	√		✓	√			
1.9. Recognize the limitation of their current knowledge and clinical abilities and realize the need for proper referral.	√	√	√				
1.10. Evaluate and respond to ongoing dental technology.		✓		✓			
2. KNOWLEDGE AND UNDERSTAND	ING	Г		T			
2.1. The interrelationship between different systems of the human body.	~		~				
2.2. The principles of pathogenic mechanisms and manifestations of human diseases which are of dental significance.	√		√				
2.3. Basis and significance of oral health promotion, nutritional education and prevention of oral diseases in population based approaches.	√	√	√				
2.4. Prevention and management of medical emergencies.	✓		✓				
2.5. Maintenance of infection control and a safe working environment.	✓		√				
2.6. Basis of practice management	√		√	√			
2.7. Principles of evidence- based dentistry and its relation to scientific	√	√	√	√			



NARS 2009	Mission Statement					
	- Efficient and effective dental health care services and high-quality learning	- Fostering continuous education as well as and encouraging innovation	- Delivering dental health care service with maximum excellency and safety	- Ensuring a conductive environment		
	experience					
research. 2.8. Ethical and medicolegal aspects relevant to the practice of dentistry and research.	√		√	✓		
2.9. Social and psychological issues relevant to dental care with emphasis on behavioral management.	√		√	√		
3. PRACTICAL AND CLINICAL SKILLS						
3.1. Establish a comprehensive patient's history, perform clinical examination, request and evaluate appropriate investigations.	~		✓			
3.2. Review the body systems and consult with other health care professionals, when required.	✓	√	√			
3.3. Detect abnormal and pathological conditions, as well as etiological and/or risk factors that may contribute to disease process.	√	√	√			
3.4. Perform a range of clinical procedures which are within the scope of general dentistry, including: 3.4.1. Applications of preventive procedures. 3.4.2. Application of different local anesthetic techniques 3.4.3. Extraction of teeth and removal of roots when necessary. 3.4.4. Diagnosis of commonly encountered oral lesions. 3.4.5. Performance of the necessary radiographs. 3.4.6. Performance of non-	*		√			



- Efficient and effective dental health care services and high-quality learning experience surgical periodontal treatment and monitor treatment outcomes. 3.4.7. Restoration of carious and non-carious tooth defects with emphasis on basic concepts of esthetics. 3.4.9. Rehabilitation of partially and completely edentulous patients. 3.4.10. Diagnosis and prevention of developing malocclusions. 3.4.11. Basic endodontic treatment. 3.5. Apply current infection control guidelines. 3.6. Control different levels of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor	NARS 2009		Mission S	STATEMENT	
learning experience and safety		effective dental health care services and high-	 Fostering continuous education as well as and encouraging 	- Delivering dental health care service with maximum	_
surgical periodontal treatment and monitor treatment outcomes. 3.4.7. Restoration of carious and non-carious tooth defects with emphasis on basic concepts of esthetics. 3.4.8. Basic endodontic procedures. 3.4.9. Rehabilitation of partially and completely edentulous patients. 3.4.10. Diagnosis and prevention of developing malocclusions. 3.4.11. Basic endodontic treatment. 3.5. Apply current infection control guidelines. 3.6. Control different levels of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor		learning	iiiiovatioii	•	
and monitor treatment outcomes. 3.4.7. Restoration of carious and non-carious tooth defects with emphasis on basic concepts of esthetics. 3.4.8. Basic endodontic procedures. 3.4.9. Rehabilitation of partially and completely edentulous patients. 3.4.10. Diagnosis and prevention of developing malocclusions. 3.4.11. Basic endodontic treatment. 3.5. Apply current infection control guidelines. 3.6. Control different levels of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor	surgical periodontal treatment	experience			
emphasis on basic concepts of esthetics. 3.4.8. Basic endodontic procedures. 3.4.9. Rehabilitation of partially and completely edentulous patients. 3.4.10. Diagnosis and prevention of developing malocclusions. 3.4.11. Basic endodontic treatment. 3.5. Apply current infection control guidelines. 3.6. Control different levels of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor	and monitor treatment outcomes.				
procedures. 3.4.9. Rehabilitation of partially and completely edentulous patients. 3.4.10. Diagnosis and prevention of developing malocclusions. 3.4.11. Basic endodontic treatment. 3.5. Apply current infection control guidelines. 3.6. Control different levels of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor ✓	emphasis on basic concepts of				
and completely edentulous patients. 3.4.10. Diagnosis and prevention of developing malocclusions. 3.4.11. Basic endodontic treatment. 3.5. Apply current infection control guidelines. 3.6. Control different levels of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor	procedures.				
of developing malocclusions. 3.4.11. Basic endodontic treatment. 3.5. Apply current infection control guidelines. 3.6. Control different levels of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor ✓	and completely edentulous patients.				
treatment. 3.5. Apply current infection control guidelines. 3.6. Control different levels of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor ✓	of developing malocclusions.				
control guidelines. 3.6. Control different levels of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor ✓					
of patient's anxiety and apprehension in different age groups. 3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor ✓		√		✓	
3.7. Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor ✓	of patient's anxiety and apprehension in different	√		√	
may occur in dental practice and perform basic life support measures. 3.8. Prescribe and monitor		✓		✓	
support measures. 3.8. Prescribe and monitor ✓ ✓ ✓	_				
3.8. Prescribe and monitor ✓	1				
		√		✓	
the effects of appropriate	the effects of appropriate				
pharmaceutical agents					
taking into consideration drug and patient factors.					
4. INTELLECTUAL SKILLS				<u> </u>	
4.1. Integrate basic ✓ ✓ ✓	S	✓	✓	✓	
biomedical, behavioral and	-				
dental sciences with signs, symptoms and physical					
findings of the disease.					
4.2. Differentiate between ✓		✓		✓	
normal and abnormal features that are particularly					
relevant to dental practice.					



NARS 2009		MISSION STATEMENT				
	- Efficient and	- Fostering	 Delivering 	- Ensuring a		
	effective	continuous	dental health	conductive		
	dental health	education as	care service	environment		
	care services	well as and	with			
	and high-	encouraging	maximum			
	quality	innovation	excellency			
	learning		and safety			
	experience		,			
4.3. Identify, prioritize and	✓		✓			
generate a list of potential						
patient's clinical problems.	,		,			
4.4. Analyze, interpret, and	✓		✓			
integrate collected						
diagnostic data to solve						
clinical problems based on						
current evidence.						
4.5. Design appropriate	✓		✓			
treatment plans for different						
dental problems.						
4.6. Assess and evaluate the	✓					
effects of medications taken						
by the patient on dental						
management.						
4.7. Reason deductively in	✓		✓			
clinicalproblem solving.						
5. GENERAL AND TRANSFERABLE S	KILLS					
5.1. Work in collaboration		✓		✓		
as a member of an						
interdisciplinary team.						
5.2. Communicate		✓		✓		
effectively in multicultural						
work environment using						
verbal and non -verbal						
means						



C. CURRICULUM & PROGRAM STRUCTURE:

C.1. Program Structure:

Program Structure	No of Courses	No of Credit Hours	Percentage*
University Requirements:	7	14	07.37 %
Program requirements:	68	172	90.53 %
Complementary requirements:	4	4	02.10 %
TOTAL:	79	190	100.00 %

^{*}Percentage depends on the number of credit hours

C.1.1. University Requirements (14 Credit Hours):

No.	Course Title	Course Code	Semester	Credit
				Hours
1	English Language (1)	UENG1	1	2
2	English Language (2)	UENG2	2	2
3	English Language (3)	UENG3	3	2
4	Introduction to Computer Science (1)	UCOM3	3	2
5	Computer Science (2)	UCOM4	4	2
6	Historical Perspectives	UHIS2	2	2
7	Arabic Language	UAR1	1	1
			Total	14

C.1.2. Program Requirements (172 Credit Hours):

Department	Course Title	Course Code	Semester	Credit Hours
Basic Dental	Dental Anatomy (1)	DDA1	1	3
Sciences	Dental Anatomy (2)	DDA2	2	3
	Oral Biology (1)	DOB3	3	3
	Oral Biology (2)	DOB4	4	3
	Oral Physiology	DOPH4	4	1
	Oral Pathology (1)	DOP5	5	3
	Oral Pathology (2)	DOP6	6	3
Prosthetic	Dental Biomaterial (1)	DDM3	3	3
Dentistry	Dental Biomaterial (2)	DDM4	4	3
	Preclinical Removable Prosthodontics	DPRP5	5	3
	(1)			
	Preclinical Removable Prosthodontics (2)	DPRP6	6	3
	Clinical Removable Prosthodontics (1)	DCRP7	7	3



Clinical Removable Prosthodontics (2)	Department	Course Title	Course Code	Semester	Credit Hours
Clinical Removable Prosthodontics (3) DCRP9 9 3 3		Clinical Removable Prosthodontics (2)		8	
Clinical Removable Prosthodontics (4) DCRP10 10 3 Preclinical Fixed Prosthodontics (1) DPFP5 5 3 Preclinical Fixed Prosthodontics (2) DPFP6 6 3 Clinical Fixed Prosthodontics (2) DCFP7 7 3 Clinical Fixed Prosthodontics (2) DCFP8 8 3 Clinical Fixed Prosthodontics (3) DCFP9 9 3 Clinical Fixed Prosthodontics (3) DCFP9 9 3 Clinical Fixed Prosthodontics (4) DCFP10 10 3 Occlusion DOCC6 6 1 Conservative Preclinical Operative Dentistry (1) DPOP5 5 3 Preclinical Operative Dentistry (2) DPOP6 6 3 Clinical Operative Dentistry (2) DCOP7 7 3 Clinical Operative Dentistry (2) DCOP8 8 3 Clinical Operative Dentistry (3) DCOP9 9 3 Clinical Operative Dentistry (4) DCOP10 10 3 Preclinical Endodontic (1) DPEN7 7 2 Preclinical Endodontic (2) DEEN8 8 2 Clinical Endodontic (2) DEEN8 8 2 Clinical Endodontic (2) DCEN10 10 3 Oral Surgery (3) DOS7 7 3 Oral Surgery (4) DOS7 7 3 Oral Surgery (3) DOS9 9 2 Oral Surgery (4) DOS10 10 2 Oral Surgery (4) DOS10 10 2 Orthodontics & Preventive Dental Medicine and Public Public Health Predodontics (2) DPEN8 8 2 Orthodontics (2) DORT7 7 2 Orthodontics (2) DORT8 8 2 Orthodontics (2) DORT9 9 2 Oral Medicine (1) DOM9 9 2 Oral Medicine (2) DORT9 7 3 Oral Medicine (2) DORT9 7 3 Oral Maxillofacial Radiology (1) DORD6 6 6 3 Oral Maxillofacial Radiology (2) DORD7 7 3 Ore Maxillofacial Radiology (2) DORD7 7 3 Ore Maxillofacial Radiology (2) DORD7 7 3 Oral Maxillofacial Rad					
Preclinical Fixed Prosthodontics (1)		. , ,		10	
Preclinical Fixed Prosthodontics (2) DPFP6 6 3		· ,			
Clinical Fixed Prosthodontics (1)		· ,		6	
Clinical Fixed Prosthodontics (2)		· ,		7	
Clinical Fixed Prosthodontics (3) DCFP9 9 3		. ,		8	
Clinical Fixed Prosthodontics (4) DCFP10 10 3		, ,		9	
Occlusion		. ,		10	
Preclinical Operative Dentistry (1) DPOP5 5 3		· ,		6	
Dentistry: Preclinical Operative Dentistry (2) DPOP6 6 3 Clinical Operative Dentistry (1) DCOP7 7 3 Clinical Operative Dentistry (2) DCOP8 8 3 Clinical Operative Dentistry (3) DCOP9 9 3 Clinical Operative Dentistry (4) DCOP10 10 3 Preclinical Endodontic (1) DPEN7 7 2 Preclinical Endodontic (2) DPEN8 8 2 Clinical Endodontic (1) DCEN9 9 3 Clinical Endodontic (2) DCEN10 10 3 Oral Surgery (1) DOS7 7 3 Oral Surgery (2) DOS8 8 3 Oral Surgery (3) DOS9 9 2 Oral Surgery (4) DOS10 10 2 Implantology DIM8 8 2 Orthodontics & Preventive Dental Medicine and Public DPH5 5 3 Health Orthodontics (1) DORT7 7 2 <t< td=""><td>Conservative</td><td></td><td></td><td>5</td><td>3</td></t<>	Conservative			5	3
Clinical Operative Dentistry (1) DCOP7 7 3	Dentistry:	, , ,	DPOP6	6	
Clinical Operative Dentistry (2) DCOP8 8 3					
Clinical Operative Dentistry (3) DCOP9 9 3					
Clinical Operative Dentistry (4) DCOP10 10 3				1	
Preclinical Endodontic (1)		, , ,			
Preclinical Endodontic (2) DPEN8 8 2				_	
Clinical Endodontic (1) DCEN9 9 3		· ,		8	
Clinical Endodontic (2) DCEN10 10 3					
Oral Surgery: Oral Surgery (2) DOS7 7 3 Oral Surgery (3) DOS9 9 2 Oral Surgery (4) DOS10 10 2 Implantology DIM8 8 2 Orthodontics & Pedodontics: Preventive Dental Medicine and Public Health DPPH5 5 3 Orthodontics (1) DORT7 7 2 Orthodontics (2) DORT8 8 2 Pedodontics (1) DPED9 9 2 Pedodontics (2) DPED10 10 2 Oral medicine, Periodontics (2) DOM10 10 2 Periodontology, Diagnosis and Oral Radiology, Diagnosis (1) DPER9 9 2 Periodontics (2) DPER10 10 2 Diagnosis (2) DPER10 10 2 Diagnosis (3) DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3		, ,		_	
Oral Surgery (2) DOS8 8 3 Oral Surgery (3) DOS9 9 2 Oral Surgery (4) DOS10 10 2 Implantology DIM8 8 2 Orthodontics & Pedodontics: Preventive Dental Medicine and Public DPPH5 5 3 Health DORT7 7 2 Orthodontics (1) DORT8 8 2 Pedodontics (2) DORT8 8 2 Pedodontics (2) DPED10 10 2 Oral medicine, Periodontology, Diagnosis and Oral Medicine (1) DOM9 9 2 Periodontics (1) DPER9 9 2 Diagnosis and Oral Medicine (2) DOM10 10 2 Diagnosis (2) DPER10 10 2 Diagnosis (2) DPER10 10 2 Diagnosis (2) DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DCHM1	Oral Surgery:	,			
Oral Surgery (4) DOS10 10 2 Implantology DIM8 8 2 Orthodontics & Pedodontics: Pedodontics: Preventive Dental Medicine and Public DPPH5 5 3 Health DORT7 7 2 Orthodontics (1) DORT8 8 2 Pedodontics (2) DORT8 8 2 Pedodontics (1) DPED9 9 2 Pedodontics (2) DPED10 10 2 Oral Medicine (1) DOM9 9 2 Periodontology, Diagnosis and Oral Radiology DPER9 9 2 Periodontics (1) DPER9 9 2 Periodontics (2) DPER10 10 2 Diagnosis DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2			DOS8	8	
Implantology		Oral Surgery (3)	DOS9	9	2
Orthodontics & Pedodontics: Preventive Dental Medicine and Public Health DPPH5 5 3 Orthodontics (1) DORT7 7 2 Orthodontics (2) DORT8 8 2 Pedodontics (1) DPED9 9 2 Pedodontics (2) DPED10 10 2 Oral medicine, Periodontology, Diagnosis and Oral Radiology Oral Medicine (2) DOM10 10 2 Periodontics (1) DPER9 9 2 Periodontics (2) DPER10 10 2 Diagnosis DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2		Oral Surgery (4)	DOS10	10	
Pedodontics: Health DORT7 7 2 Orthodontics (1) DORT8 8 2 Pedodontics (1) DPED9 9 2 Pedodontics (2) DPED10 10 2 Oral medicine, Periodontology, Diagnosis and Oral Radiology Oral Medicine (1) DOM9 9 2 Periodontics (1) DPER9 9 2 Periodontics (1) DPER9 9 2 Periodontics (2) DPER10 10 2 Diagnosis DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2		Implantology	DIM8	8	2
Orthodontics (2) DORT8 8 2 Pedodontics (1) DPED9 9 2 Pedodontics (2) DPED10 10 2 Oral medicine, Periodontics (2) DOM9 9 2 Periodontology, Diagnosis and Oral Radiology Periodontics (1) DPER9 9 2 Diagnosis Oral& Maxillofacial Radiology (1) DDS7 7 3 Oral& Maxillofacial Radiology (2) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2			DPPH5	5	3
Pedodontics (1) DPED9 9 2 Pedodontics (2) DPED10 10 2 Oral medicine, Periodontology, Periodontology, Diagnosis and Oral Radiology Oral Medicine (2) DOM10 10 2 DPER9 9 2 DPER9 9 2 DPER10 10 2 Diagnosis DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2		Orthodontics (1)	DORT7	7	2
Pedodontics (2) DPED10 10 2 Oral medicine, Periodontology, Diagnosis and Oral Radiology Oral Medicine (2) DOM10 10 2 Diagnosis and Oral Radiology Periodontics (1) DPER9 9 2 Diagnosis DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2		Orthodontics (2)	DORT8	8	2
Oral medicine, Periodontology, Diagnosis and Oral Radiology Oral Medicine (1) DOM9 9 2 Diagnosis and Oral Radiology Periodontics (1) DPER9 9 2 Diagnosis DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2		, ,			
Periodontology, Diagnosis and Oral Radiology Oral Medicine (2) DOM10 10 2 Diagnosis and Oral Radiology Periodontics (1) DPER9 9 2 Diagnosis DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2		Pedodontics (2)		10	2
Diagnosis and Oral Radiology Periodontics (1) DPER9 9 2 Diagnosis DDS7 10 2 Diagnosis DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2	-	•			
Oral Radiology Periodontics (2) DPER10 10 2 Diagnosis DDS7 7 3 Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2		, ,		1	
DiagnosisDDS773Oral& Maxillofacial Radiology (1)DORD663Oral& Maxillofacial Radiology (2)DORD773ChemistryDCHM112	_				
Oral& Maxillofacial Radiology (1) DORD6 6 3 Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2	Oral Kadiology			1	
Oral& Maxillofacial Radiology (2) DORD7 7 3 Chemistry DCHM1 1 2					
Chemistry DCHM1 1 2					
·		· · · ·			
F		Physics	DPHS1	1	2



Department	Course Title	Course Code	Semester	Credit Hours
Basic & Clinical	General Anatomy (1)	DGA1	1	2
Medical	General Anatomy (2)	DGA2	2	3
Sciences	General Physiology (1)	DGPH1	1	2
	General Physiology (2)	DGPH2	2	2
	General Histology	DGH2	2	3
	Pharmacology (1)	DPHR3	3	3
	Pharmacology (2)	DPHR4	4	2
	Biochemistry (1)	DBCHM2	2	2
	Biochemistry (2)	DBCHM3	3	2
	General Pathology (1)	DGP3	3	2
	General Pathology (2)	DGP4	4	3
	Microbiology	DMIC4	4	3
	Biostatistics	DBS5	5	1
	General Medicine, Skin and Venereal Diseases	DGM5	5	3
	General Surgery, ENT and Ophthalmology	DGS6	6	3
	Infection Control	DIC4	4	1
	Dental Ethics & Human Rights	DEHR2	2	1
			Total	172

C.1.3. Complementary Elective Requirements (4 Credit Hours):

No.	Course Title	Course Code	Semester	Credit Hours
1	Nutrition	DNUT1	1	1
2	Philosophic Thinking and Scientific Thinking	DPH1	1	1
3	Business Administration	DBA3	3	1
4	Exercise Physiology	DEPH3	3	1
5	Impact of Technology on Society	DITS4	4	1
6	Communication Skills	DCS4	4	1
7	Medical and Social Psychology	DMSP5	5	1
8	Dental Photography	DPHO5	5	1
9	Cardiopulmonary Resuscitation	DCPR5	5	1
			Total	4



C.2. Program Study Plan:

SEMESTER 1						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
UENG1	English Language (1)	None	2	ı	2	100
DCHM1	Chemistry	None	1	2	2	100
DPHS1	Physics	None	1	2	2	100
DDA1	Dental Anatomy (1)	None	2	2	3	100
DGA1	General Anatomy (1)	None	1	2	2	100
DGPH1	General Physiology (1)	None	1	2	2	100
UAR1	Arabic Language	None	2	-	2	100
FE1	Faculty Elective	None	1	-	1	100
Total			11	10	16	800

Th/Tu= theoretical/tutorial; Pr =practical; CH= credit hour

SEMESTER 2						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
UENG2	English Language (2)	UENG1	2	1	2	100
DBCHM2	Biochemistry (1)	DCHM1	1	2	2	100
DGA2	General Anatomy (2)	DGA1	2	2	3	100
DDA2	Dental Anatomy (2)	DDA1	2	2	3	100
DGPH2	General Physiology (2)	DGPH1	2	-	2	100
DGH2	General Histology	None	2	2	3	100
DEHR2	Dental Ethics & Human Rights	None	1	-	1	100
UHIS2	Historical perspectives	None	2	ı	2	100
Total			14	8	18	800

SEMESTER 3						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
UENG3	English Language (3)	UENG2	2	ı	2	100
DPHR3	Pharmacology (1)	DGPH2	2	2	3	100
DOB3	Oral Biology (1)	DGH2	2	2	3	100
DDM3	Dental Biomaterial (1)	DCHM1+	2	2	3	100
		DPHS1				
DBCHM3	Biochemistry (2)	DBCHM2	1	2	2	100
DGP3	General Pathology (1)	DGH2	1	2	2	100
UCOM3	Introduction to Computer	None	1	2	2	100
	Science (1)					
FE2	Faculty Elective	None	1	-	1	100
Total			12	12	18	800



SEMESTER 4						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
UCOM4	Computer Science (2)	UCOM3	1	2	2	100
DPHR4	Pharmacology (2)	DPHR3	1	2	2	100
DOB4	Oral Biology (2)	DOB3	2	2	3	100
DOPH4	Oral Physiology	DDA2	1	-	1	100
DGP4	General Pathology (2)	DGP3	2	2	3	100
DDM4	Dental Biomaterial (2)	DDM3	2	2	3	100
DMIC4	Microbiology	None	2	2	3	100
DIC4	Infection Control	None	1	-	1	100
FE3	Faculty Elective	None	1	-	1	100
Total			13	12	19	900

SEMESTER 5						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
DOP5	Oral Pathology (1)	DOB4 + DGP4	2	2	3	100
DPOP5	Preclinical Operative Dentistry (1)	DOB4 + DDM4	1	4	3	100
DPRP5	Preclinical Removable Prosthodontics (1)	DGA2 + DDM4	1	4	3	100
DPFP5	Preclinical Fixed Prosthodontics (1)	DOB4 + DDM4	1	4	ß	100
DPPH5	Preventive Dental Medicine and Public Health	DOB4	2	2	3	100
DGM5	General Medicine, Skin, Venereal Diseases	DGP3 +DPHR4	2	2	З	100
DBS5	Biostatistics	None	1	-	1	100
FE4	Faculty Elective	None	1	-	1	100
Total			11	18	20	800

SEMESTER 6						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
DOP6	Oral Pathology (2)	DOP5+ DOB4	2	2	3	100
DPOP6	Preclinical Operative Dentistry (2)	DPOP5	1	4	3	100
DPRP6	Preclinical Removable Prosthodontics (2)	DPRP5	1	4	3	100
DPFP6	Preclinical Fixed Prosthodontics (2)	DPFP5	1	4	3	100
DORD6	Oral& Maxillofacial Radiology (1)	DGA2+ DPHS2	2	2	3	100



SEMESTER 6						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
DOCC6	Occlusion	DGA2+ DOPH4	1	-	1	100
DGS6	General Surgery, ENT, Ophthalmology	DGM5	2	2	3	100
Total			10	18	19	700

SEMESTER 7						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
DCOP7	Clinical Operative Dentistry (1)	DPOP6 +	1	4	3	100
		DDM3				
DCRP7	Clinical Removable	DPRP6 +	1	4	3	100
	Prosthodontics (1)	DDM3				
DCFP7	Clinical Fixed Prosthodontics	DPFP6 +	1	4	3	100
	(1)	DDM3				
DOS7	Oral Surgery (1)	DORD6 +	1	4	3	100
		DOP6				
DORT7	Orthodontics (1)	DOH4 +	1	2	2	100
		DOCC6				
DPEN7	Preclinical Endodontic (1)	DPOP6 +	1	2	2	100
		DOP6				
DORD7	Oral& Maxillofacial Radiology	DORD6 +	2	2	3	100
	(2)	DOP6				
DDS7	Diagnosis	DORD6	2	2	3	100
Total			10	24	22	800

SEMESTER 8						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
DCOP8	Clinical Operative Dentistry (2)	DCOP7	1	4	3	100
DCRP8	Clinical Removable	DCRP7	1	4	3	100
	Prosthodontics (2)					
DCFP8	Clinical Fixed Prosthodontics	DCFP7	1	4	3	100
	(2)					
DOS8	Oral Surgery (2)	DOS7	1	4	3	100
DORT8	Orthodontics (2)	DORT7	1	2	2	100
DPEN8	Preclinical Endodontic (2)	DPEN7 +	1	2	2	100
		DCOP7				
DIM8	Implantology	DOS7 +	1	2	2	100
		DORD7				
Total			7	22	18	700



SEMESTER 9						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
DCOP9	Clinical Operative Dentistry (3)	DCOP8	1	4	3	100
DCRP9	Clinical Removable	DCRP8	1	4	3	100
	Prosthodontics (3)					
DCFP9	Clinical Fixed Prosthodontics	DCFP8	1	4	3	100
	(3)					
DCEN9	Clinical Endodontic (1)	DPEN8	1	4	3	100
DOS9	Oral Surgery (3)	DOS8	1	2	2	100
DPED9	Pedodontics (1)	DCOP8+DPPH5	1	2	2	100
DOM9	Oral Medicine (1)	DDS7+DGM5 +	1	2	2	100
		DOP6				
DPER9	Periodontics (1)	DORD7	1	2	2	100
Total			8	24	20	800

SEMESTER 10						
Code No.	Course title	Prerequisite	Th/Tu	Pr	СН	Marks
DCOP10	Clinical Operative Dentistry (4)	DCOP9	1	4	3	100
DCRP10	Clinical Removable	DCRP9	1	4	3	100
	Prosthodontics (4)					
DCFP10	Clinical Fixed Prosthodontics	DCFP9	1	4	3	100
	(4)					
DCEN10	Clinical Endodontic (2)	DCEN9	1	4	3	100
DOS10	Oral Surgery (4)	DOS9	1	2	2	100
DPED10	Pedodontics (2)	DPED9	1	2	2	100
DOM10	Oral Medicine (2)	DOM9	1	2	2	100
DPER10	Periodontics (2)	DPER9	1	2	2	100
			8	24	20	800



C.3. Matrix 5: Mapping Matrix of Program Learning Outcomes:

Alignment of program learning outcomes with program courses, according to the following desired levels of performance (I = Introduced, P = Practiced, M = Mastered)

Course Code	A 1	A 2	A 3	A 4	A 5	A 6	B 1	B 2	C 1	C 2	C 3	D 1	D 2	D 3	D 4	D 5
UENG1			7.0													
DCHM1	ı					•						<u></u>				•
DPHS1	i															
DDA1	i															
DGA1	i															
DGPH1						•										
UAR1						•						I				
FE1												•	ı			
UENG2												ı	•			
DBCHM2	ı											•				
DGA2	<u>'</u>															
DDA2	' 															
DGPH2																
DGPH2 DGH2	' 															
DEHR2	<u> </u>	ı	l									I				ı
UHIS2			•									ı				•
UENG3												I				
DPHR3	l			I												
DOB3	<u> </u>			<u>-</u>												
DDM3				I												
DBCHM3	l -															
DGP3	ı								_	_						
UCOM3									I	I			_			
FE2													ı			
UCOM4									I	ı						
DPHR4	ı			ı												
DOB4	I															
DOPH4	I															
DGP4	l															
DDM4				ı		•										
DMIC4	ı															
DIC4	ı			ı												
FE3											_		ı			
DOP5				ı	I		ı	ı								
DPOP5				I							I		ı			
DPRP5				I							ı		I			
DPFP5				I							ı		I			



Course Code	A 1	A 2	A 3	A 4	A 5	A 6	B 1	B 2	C 1	C 2	C 3	D 1	D 2	D 3	D 4	D 5
DPPH5						ı		ı						ı	ı	
DGM5	Р			ı				ı								
DBS5									I	ı						
FE4													Р			
DOP6				ı	I		- 1	I								
DPOP6				ı							ı		I			
DPRP6				I							I		I			
DPFP6				ı							I		I			
DORD6					ı			ı								
DOCC6	Р			ı				ı								
DGS6	Р			ı				ı								
DCOP7		I	Р	Р	Р	Р	Р	Р	Р		Р	Р	ı	Р	I	I
DCRP7		I	Р	Р	Р	Р	Р	Р	Р		Р	Р	I	Р	ı	ı
DCFP7		ı	Р	Р	Р	Р	Р	Р	Р		Р	Р	I	Р	I	ı
DOS7	Р			ı	ı	ı	ı	ı				Р	ı		ı	ı
DORT7				ı	ı		I	ı								
DPEN7				Р							Р		I			
DORD7					Р			Р					I			
DDS7					Р		Р	Р				_				I
DCOP8		Р	Р	Р	Р	Р	Р	Р	Р		Р	Р	Р	Р	Р	Р
DCRP8		Р	Р	Р	Р	Р	Р	Р	Р		Р	Р	Р	Р	Р	Р
DCFP8		Р	Р	Р	Р	Р	Р	Р	Р		Р	Р	Р	Р	Р	Р
DOS8	Р			Р	Р	Р	Р	Р				Р	Р		Р	Р
DORT8				I	ı		ı	ı								
DPEN8				Р							Р					
DIM8				Р	I		Р		Т	P	ı		Р			
DCOP9		M	M	М	M	М	M	М	M		М	M	М	М	M	М
DCRP9		M	M	M	M	M	M	М	M		М	M	M	M	M	M
DCFP9		M	М	M	M	М	M	М	M		М	M	М	М	M	M
DCEN9		M	M	M	M	M	M	M	M		M	M	М	M	M	М
DOS9	M			M	M	M	M	М			M	M	М			
DPED9		M	M	M	M	М	M	М	M	M	М	M			M	M
DOM9	M	M	M		M		M	М	M	M	М	M			M	M
DPER9	M	M	M		М		M	М	M	M	М	M			M	M
DCOP10		M	M	M	M	М	M	М	M		М	M	М	M	M	M
DCRP10		М	M	М	М	М	M	М	M		М	M	М	M	M	М
DCFP10		M	M	М	M	M	M	М	M		М	M	М	М	M	М
DCEN10		M	М	M	M	M	M	M	M		M	M	M	M	M	M
DOS10	M			M	M	М	M	М			М	M	М			
DPED10		M	M	M	M	M	M	М	M	M	М	M			M	M
DOM10	M	M	M		M		M	M	M	M	M	M			M	М
DPER10	M	M	M		M		M	M	M	M	M	M			M	M



C.4. Teaching Strategies to Achieve Program Learning Outcomes:

A. Knowledge & Understanding	B. Intellectual Skills	C. Professional & Practical Skills	D. General & Transferable Skills
- Lecture 1. Traditional 2. Flipped classroom 3. E-Learning lecture - Group discussions & seminars - Online materials - Self-learning	 Lecture Traditional Flipped classroom E-Learning lecture Group discussions seminars Online materials Self-learning 	 Lecture Traditional Flipped classroom E-Learning lecture Supervised lecture Supervised practical / clinical instruction & practice Group discussions	 Lecture Traditional Flipped classroom E-Learning lecture Supervised practical / clinical instruction & practice Group discussions & seminars Out-reach activities Team-based learning Role play Field training

C.4.1. Teaching Policies & Strategies:

The BDS at Faculty of Dentistry / Deraya University is a highly specialized program that requires special instruction and training to achieve its learning outcomes. So, the program is designed as a full-time instruction. The mode of instruction is a traditional classroom of face-to-face direct approach, that requires full-time attendance of the student.

Deraya University has an official subscription to a major Electronic Learning Management Systems (LMS) namely Microsoft Teams. A special account or team is assigned to each course joining the course coordinator and course enrolled students. Due to the nature of the program, the use of these platforms is only limited for electronic assessment (quizzes and assignments) and as a discussion forum that increases students / instructors' communication. Any additional course learning materials including audio-visual aids, textbooks and special scientific articles as well as lecture records if possible, are made available and uploaded to the course page in these platforms.

Variety of teaching and learning strategies are applied for the delivery and achievement of the specific program learning outcomes, but certain strategies are selected according to the following factors:

1. Program delivery nature



- 2. Documented effectiveness of the teaching strategy in dental education and achievement of program learning outcomes
- 3. Compatibility of the teaching strategy with the facilities and resources at TUCD
- 4. Experience of faculty members in using the selected strategy in order to ensure proper implementation

The teaching and learning strategies to be used are:

- 1. Lectures
- 2. Group discussions and seminars
- 3. Supervised practical / clinical instruction and practice
- 4. Out-reach activities
- 5. Online materials
- 6. Self-learning
- 7. Team-based learning
- 8. Role play
- 9. Field training

1. Lectures:

Lectures are applied as a teaching strategy for program learning outcomes of knowledge and understanding domain as well as certain intellectual skills and transferable skills domains. The scientific contents are presented either as a direct lecture approach or in flipped classroom approach and sometimes as an online E-Learning lecture using the available online educational platforms of Deraya University (Microsoft Teams).

Direct lecturing approach requires presenting the scientific content by the speaker using any digital presentation application (e.g., PowerPoint or Keynote), smart boards or even white boards and charts. Flipped classroom is an active, student-centered approach that was formed to increase the quality of period within class and are mostly applied in clinical courses of the program. This approach is applied when the topic to be discussed targets to improve cognitive, critical thinking and problem-solving skills of the students. The flipped classroom approach requires the students to preliminary receive the scientific materials to be discussed either in a hard or soft form before the time of the lecture. At the time of flipped classroom session, the instructor guides the discussion with the student to lead them to the final required conclusion. Online E-Learning lectures are applied as a substitutive approach to compensate for unexpectedly canceled or missed lecture. Online lectures are also used for extracurricular activities or instructions when the student and/or instructors daily schedule does not allow for a common time between them.

Regardless the used approach in delivering the lecture, lectures begin with overview of content to be presented linking it to previous information and explaining its significance and conclude with a review. Tutorials review material presented in lectures to check understanding and provide clarification required before discussing the potential uses of the information.

2. Group discussions and seminars:

Group discussions and seminars are helpful strategy in achieving most of the program learning outcomes under all domains specially those related to clinical courses. The students are not



only directed to improve their cognitive and critical thinking skills but also, they will be exposed to professional responsibilities.

Group discussions are highly important teaching approach during practical and clinical sessions. This ensures and strength the application of practical / clinical concepts and techniques as well as the ethical and moral values of the program. Group discussion also plays a major role in improving communication skills and professional behavior of the students. Discussion with student about open-ended issues regarding dental management contribute to strengthen both decisions making skills when choosing among a couple of alternatives and communication skills with respect to diversity.

Seminars are scheduled for courses required students' presentations. Each student or group of students is expected to prepare a topic related to course and present it for the whole class. Topics are to be selected by the respective lecturer/course coordinator, then to be distributed to students and each student/group of students is to prepare the material by discussing with the course coordinator for each topic and to present it for the whole class. Evaluation of the topics prepared by student/group of students according to the content, arrangement, and covering of the topic with pre-prepared detailed rubric declared to the students in advance. All other attendant students are engaged in seminar interaction with questions and answers.

Both group discussions and seminars encourage a self- critical evaluation of student existing knowledge and behavior pattern in solving problems in dental management of different patients that enhance excellence in dental services.

3. Supervised practical / clinical instruction and practice:

At the practical / clinical sessions, the students are exposed directly to the professional responsibilities and psychomotor skills required to be a general dentist under complete supervision of the course's instructors

According to the hierarchy of the program levels, an ascending professional development of the psychomotor, cognitive, interpersonal and communication required skills is followed from a preclinical practice to a fully clinical practice integrating the previously discussed scientific knowledge and information. The preclinical practice sessions are mainly focusing in developing the psychomotor skills applied on dummies and simulators while the in clinical practice sessions the students apply the gained psychomotor skills integrated with the cognitive, ethical, interpersonal, communication and problem-solving skills on a real live patient.

For both preclinical and clinical practice session, the instructor not only demonstrated the assigned training exercise but also supervise and follow up the students' performance and progress through certain structured practical / clinical requirements defined according to the nature of the course and submitted by the student in an assigned time according to each course plan. This also allows the student to master time management and time control by monitoring the time appointed to finish and submit the practical/clinical requirements.



4. Out-reach activities:

A team-based out-reach activities under supervision of faculty members are oriented to firm the concepts of teamwork with professional conducts, professional communication, and community service. These out-reach activities allow the students to plan, implement an evaluate the community needs and related dental and oral health program.

In addition to student's participation in providing minor dental health care and dental health education within these out-reach activities, they collect data, plan a dental health program with complete analysis and report of its progress and finally present their results of these plans.

5. Online materials:

Online scientific materials constitute a huge literature and updated database of knowledge and information. Any optional online materials for each course are assigned within the course specification document including all journals, textbooks, and websites. Any additional online materials could be provided by the course coordinator who made it available for the student at the online course page on Microsoft Teams platform.

6. Self-learning:

Students are directed by course coordinators and instructors for self-directed learning using different available media, websites, organizational and non-organizational workshops.

7. Team-based learning:

A structured form of small cooperative group learning that emphasizes student preparation out of class and application of knowledge in class. Students are organized strategically into diverse teams of 5-7 students that work together throughout the class. Before each unit or module of the course, students prepare by reading prior to class. In class, groups present, discuss, and share their outclass gained knowledges and activities with other groups.

8. Role play:

A learning structure that allows the student to immediately apply content as they are put in the role of a decisions maker who must decide regarding the policy, resource allocation or any other outcome. This task could be carried out either individually per each student or in cooperative groups. This technique allows for students' engagement and interaction with peers

9. Field training:

After completing the 10 semesters of the program the students are mandatory enrolled within a full year internship field training that allows for higher level of clinical practice. This internship field experience refines and fine tunes the learning outcomes achievement at all the levels of skills and values domains.



C.5. Assessment of Program Learning Outcomes:

C.5.1. Assessment Plan:

Program assessment plan is a multiphase cycle that includes planning phase, organizing phase, implementation phase, review phase and finally improvement phase.

I. Planning phase:

Planning phase aims to align the student learning outcomes of each individual course of the program with the general program learning outcomes. Determination of participation level and importance of each course learning outcome as well as the satisfactory performance cut score is the course instructors and department responsibility and should be documented in departments meetings minutes. This alignment and relation between course learning outcomes and program learning outcomes are then reviewed and approved by the by the quality unit to ensure its consistency and hierarchical relation with the program objective and mission as well as graduate attributes assigned within the program tree. Accordingly, the capstone courses are tagged (Courses that achieve the learning outcomes at the mater level which are namely all the courses of 9th and 10th semesters).

II. Organizing phase:

Organizing phase includes determination of assessment tools, time, and focus groups. Also, the common formats and assessment templates are designed. Series of workshops are to be held at departmental level for all faculty members to train them how to use the assessment template.

III. Implementation phase:

Implementation phase concerns with establishment of assessment cycle and collecting data. All the program's course learning outcomes are to be assessed annually both directly and indirectly by all assigned assessment methods involved within the course specification document and assessment result analysis is to be reported within the course report. Indirect assessment is only focused to survey the perception and satisfaction of the senior final year students and graduates of internship program.

IV. Review phase:

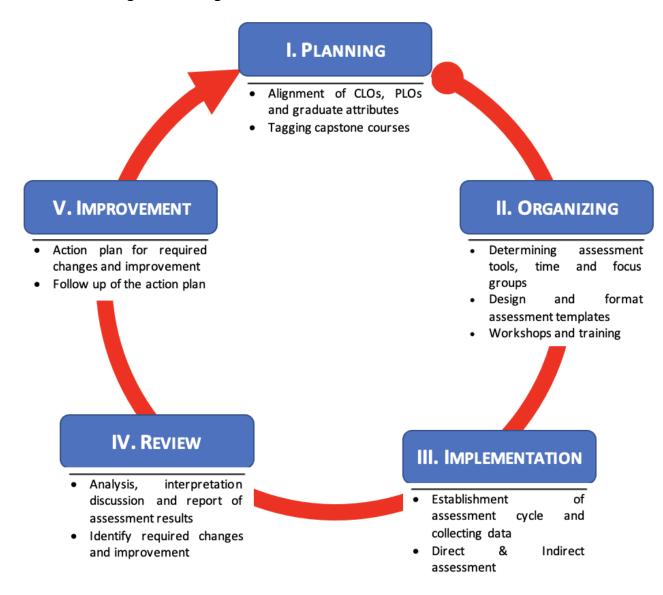
Review phase concerned with analysis and interpretation of the assessment results. The results are then discussed, reported to identify the required changes and improvements.

V. improvement phase:

Finally, the improvement phase comes on to develop an action plan to implement the required changes and improvements and follow up the action plan to close the assessment cycle. The full program assessment cycle is coordinated with the full program cycle (5 years) for each enrolled batch.



Flowchart of Program Learning Outcomes Assessment Plan





C.5.2. Assessment Methodologies:

I. Direct assessment: (rubric-based)

E.	Knowledge &	F. Intellectual Skills	G. Professional &	H. General &
	Understanding		Practical Skills	Transferable Skills
-	Quizzes	- Quizzes	- Practical / clinical	- Practical / clinical
-	MCQs	- MCQs	requirements	requirements
-	EMCQs	- EMCQs	- OSPE / OSCE	- OSPE / OSCE
-	Short essay	- Practical / clinical	- Practical / Clinical	- Practical / Clinical
	Assignments	requirements	Exams	Exams
-	Presentations	- OSPE / OSCE	- Personal portfolio	- Presentations
		- Practical / Clinical		- Oral exam
		Exams		- Out-reach project
		- Presentations		- Personal portfolio
		- Oral exam		
		- Out-reach project		
		- Personal portfolio		

II. Indirect assessment:

1. Surveys:

- Senior students survey (by the 13 or week of level 10th semester)
- Graduate students (interns) survey (by the last week of internship program)
- Alumni survey
- Training providers survey
- Employer survey

Surveys aims to assess the following parameters of program learning outcomes:

- Perception
- Preparation
- Improtance

All surveys are measured according to Likert's scale. All surveys are designed to evaluate the preparedness of the students and importance of program learning outcomes except senior student surveys evaluate only the students' perception of program learning outcomes



D. STUDENTS ADMISSION & SUPPORT:

D.1. Admission:

The student should hold an Egyptian high school certificate (Thanawia Ammah) or equivalent certificate accepted by the Egyptian Supreme Council of Private Universities and the Egyptian Ministry of Higher Education.

All high school certificates holders should obtain at least the minimum percentage score set by the Supreme Council of Private Universities, which is currently set as 90%. Students not meeting the English language requirements receive conditional acceptance and are requested to be enrolled in extra English language courses. Also, students must fulfill the university requirements.

D.2. Guidance & Orientation:

Comprehensive orientation programs are available for commencing students to ensure thorough understanding of the services and facilities available for them, and of their obligations and responsibilities. At university level, a general orientation program for all freshmen is implemented. Orientation program is well embedded practice in the Faculty of Dentistry. A specialized orientation program is prepared and presented to the newly admitted students; which included several lectures delivered by a number of faculty members in which they discussed; student rights and responsibilities, academic advising, dentistry curriculum, life at the faculty, curricular and extracurricular activities and leadership characteristics.

At course level, the first lecture of each course is assigned for student orientation about the course content, plan, requirements, assessments as well as marks distribution. All these data are also included in the course card

D.3. Students Counselling:

Faculty of Dentistry established "Academic Counselling Unit" with the following responsibilities:

- 1. Assign staff members as academic advisors and announce allocated time for office hours where academic advising is carried out
- 2. Help students to register their courses
- 3. Monitor students with exceptional/poor performance
- 4. Students' guidance through out their study



E. PROGRAM QUALITY ASSURANCE:

E.1. Academic Standards & Benchmarks:

- National Academic Reference Standards (NARS)

E.1.1. Curriculum Structure according to NARS:

Sciences	% According to NARS	% At Faculty of Dentistry	
Category	Credit Hours	IVANS	Curriculum
Basic Sciences (Including basic medical and dental sciences)	53	28% - 30%	27.90%
Medical & Dental Sciences	54 Didactic	21% - 25%	28.42%
	65 Laboratory / Clinical	33% - 37%	34.21%
Complementary Sciences	4	5% - 8%	2.10 %
Discretionary Subjects	14	6% - 8%	7.37 %
Total		100 %	100 %

Basic Sciences Courses (Medical & Dental)						
Courses	Credit Hours					
Dental Anatomy (1)	3					
Dental Anatomy (2)	3					
Oral Biology (1)	3					
Oral Biology (2)	3					
Oral Physiology	1					
Oral Pathology (1)	3					
Oral Pathology (2)	3					
Chemistry	2					
Physics	2					
General Anatomy (1)	2					
General Anatomy (2)	3					
General Physiology (1)	2					
General Physiology (2)	2					
General Histology	3					
Pharmacology (1)	3					
Pharmacology (2)	2					
Biochemistry (1)	2					
Biochemistry (2)	2					



Basic Sciences Courses (Medical & Dental)	
Courses	Credit Hours
General Pathology (1)	2
General Pathology (2)	3
Microbiology	3
Biostatistics	1
Total credit hours	53
% At Faculty of Dentistry Curriculum	27.90%
% According to NARS	28% - 32%

Medical & Dental Core Courses	
Courses	Credit Hours
Preclinical Removable Prosthodontics (1)	3
Preclinical Removable Prosthodontics (2)	3
Dental Biomaterial (1)	3
Dental Biomaterial (2)	3
Clinical Removable Prosthodontics (1)	3
Clinical Removable Prosthodontics (2)	3
Clinical Removable Prosthodontics (3)	3
Clinical Removable Prosthodontics (4)	3
Preclinical Fixed Prosthodontics (1)	3
Preclinical Fixed Prosthodontics (2)	3
Clinical Fixed Prosthodontics (1)	3
Clinical Fixed Prosthodontics (2)	3
Clinical Fixed Prosthodontics (3)	3
Clinical Fixed Prosthodontics (4)	3
Occlusion	1
Preclinical Operative Dentistry (1)	3
Preclinical Operative Dentistry (2)	3
Clinical Operative Dentistry (1)	3
Clinical Operative Dentistry (2)	3
Clinical Operative Dentistry (3)	3
Clinical Operative Dentistry (4)	3
Preclinical Endodontic (1)	2
Preclinical Endodontic (2)	2
Clinical Endodontic (1)	3
Clinical Endodontic (2)	3
Oral Surgery (1)	3
Oral Surgery (2)	3
Oral Surgery (3)	2
Oral Surgery (4)	2
Implantology	2
Preventive Dental Medicine and Public Health	3
Orthodontics (1)	2
Orthodontics (2)	2



Medical & Dental Core Courses		
Courses	Credit Hours	
Pedodontics (1)	2	
Pedodontics (2)	2	
Oral Medicine (1)	2	
Oral Medicine (2)	2	
Periodontics (1)	2	
Periodontics (2)	3	
Diagnosis	2	
Oral& Maxillofacial Radiology (1)	3	
Oral& Maxillofacial Radiology (2)	3	
General Medicine, Skin and Venereal Diseases	3	
General Surgery, ENT and Ophthalmology	3	
Infection Control	1	
Dental Ethics & Human Rights	1	
Biostatistics	1	
Total Didactic Credit Hours	54	
% At Faculty of Dentistry Curriculum	28.42%	
% According to NARS	21% - 25%	
Total Laboratory / Clinical Credit Hours	65	
% At Faculty of Dentistry Curriculum	34.21%	
% According to NARS	33% - 37%	

University Required Courses		
Courses	Credit Hours	
English Language (1)	2	
English Language (2)	2	
English Language (3)	2	
Introduction to Computer Science (1)	2	
Computer Science (2)	2	
Historical Perspectives	2	
Arabic Language	2	
Total credit hours	14	
% At Faculty of Dentistry Curriculum	7.37%	
% According to NARS	6% - 8%	

Complementary Elective Courses		
Courses	Credit Hours	
Nutrition	1	
Business Administration	1	
Philosophic Thinking and Scientific Thinking	1	
Exercise Physiology	1	
Impact of Technology on Society	1	
Medical and Social Psychology	1	



Complementary Elective Courses	
Courses	Credit Hours
Dental Photography	1
Cardiopulmonary Resuscitation	1
Communication Skills	1
Total credit hours	4
% At Faculty of Dentistry Curriculum	2.10%
% According to NARS	5% - 8%

E.2. Program Quality Monitoring Procedures:

Program quality is monitored along its levels through series of monitoring activities that include data gathering, analysis and reporting:

- Reports of Student Counselling Unit
- Assessment of course learning outcomes (Direct & Indirect)
- Assessment of program learning outcomes (Direct & Indirect)
- Surveying student perception of educational environment
- DREEM analysis (Dundee Ready Educational Environment Measure) (Optional either course or program level)
- Course report
- Program report with full analysis of program KPIs

	F.	PROGRAM S	SPECIFICATION A	Approval Data:
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Council / Committee:
Reference No.:
Date: