

# توصيف برنامج بكالوريوس طب وجراحة الفم والاسنان لائحة 2023

وحدة ضمان الجودة  
كلية: طب الأسنان فرع: العريش

# Program Specification of Bachelor's Degree of Dental Surgery

**2024-2025**



## Program Specification

### I- Basic Information

<b>Program Title</b>	Bachelor's Degree of Dental Surgery.
<b>Award/degree</b>	BDS
<b>No. of Program Credit Hours</b>	192 hours
<b>Department(s) responsible:</b>	<ul style="list-style-type: none"> <li>• <b><u>For Dental Courses</u></b> <ul style="list-style-type: none"> <li>- Restorative Dentistry</li> <li>- Oral Histopathology</li> <li>- Prosthetic Dentistry</li> <li>- Oral and Maxillofacial Surgery</li> <li>- Orthodontics and Pediatric Dentistry</li> <li>- Oral Medicine, Periodontics, Diagnostic and Oral Radiology</li> <li>- Supplementary Basic &amp; Medical Sciences</li> </ul> </li> <li>• <b><u>Courses taught at Department of Supplementary Basic Sciences Sinai University</u></b> <ul style="list-style-type: none"> <li>- Physics</li> </ul> </li> <li>• <b><u>Courses taught at Department of Supplementary Medical Sciences, Sinai University</u></b> <ul style="list-style-type: none"> <li>- Biochemistry - Physiology - General Histology - Human Anatomy - General Pathology - Pharmacology - Microbiology and Immunology - Internal Medicine and Dermatology - General Surgery and ENT and Ophthalmology.</li> </ul> </li> <li>• <b><u>University Obligatory Courses:</u></b> <ul style="list-style-type: none"> <li>- English Language - Introduction to Informatics - Scientific Thinking- Sinai History - Human Rights - Presentation and Communication Skills</li> </ul> </li> <li>• <b><u>Elective Courses</u></b> <ul style="list-style-type: none"> <li>- Introduction to Psychology - Introduction to Business Administration - Introduction to Sociology - Laser in Dentistry</li> <li>- Digital Dentistry- Dental Photography</li> </ul> </li> </ul>
<b>Coordinator:</b>	<b>Assoc. Prof Mohammed Moowad</b>
<b>Internal evaluator</b>	<b>Prof. Nagwa Ghoname, Prof. Abeer Gawish</b>
<b>External evaluator(s):</b>	<b>Prof. Ahmed Rashad</b>
<b>Date of most recent approval of program specification by the Faculty Council:</b>	<b>11-8-2024</b>

## ***II- Professional Information***

### ***1. Program aims:***

1. Acquire the knowledge, skills and experience necessary to provide oral and dental health care services within the scope of general dentistry
2. Effectively communication with the members of the dental team and the patients taking in consideration the patients' needs, socio-economic aspects.
3. Provide ethical professional dental care following the various features of medico-legal aspects of dental practice.
4. Possess personal skills in presentation, communication with the ability to use ongoing technology in the dental field.
5. Build the foundation of scientific knowledge on which clinical practice is based on infection controlled and safe environments.
6. Practice different treatment modalities in the dental field within the scope of general dentistry with proper referral whenever needed.
7. Realize the importance of lifelong learning and strive for continuous professional education.
8. Master common oral and dental diseases at the individual and community levels including prevention, diagnosis and management.
9. Integrate the advances in knowledge, techniques and quality assurance in dental practice.

### ***2. Intended learning outcomes (ILOs) for program:***

#### ***2. A. Knowledge and understanding:***

*By the end of this program, each graduate should be able to:*

- A1. Describe the fundamentals of physics for dental education, principles of biostatistics, as well as properties, applications and effective selection of dental biomaterials.
- A2. Recognize academic English, scientific terminology, and basic principles of informatics skill required for successful and effective engagement in the undergraduate academic community.
- A3. Discuss the biomedical basis of human growth as well as anatomy, functions of the head and neck, oral cavity, dentitions, and occlusion as an integral part of general health and diseases.
- A4. Recognize the functions of different body organs and systems, normal hemostasis, and the mechanism of response to insults including trauma and diseases.
- A5. Discuss the pathogenesis of infection, inflammation, neoplasia, metabolic disturbances microbiological, immunological, histopathological, and epidemiological aspects of diseases affecting the body, oral and maxillofacial region.

- A6. Explain the pharmacological properties of drugs used in dental practice including their interactions and side effects which imply safe prescription of the appropriate drug by the dentist.
- A7. Identify sources of infection and the principles of sterilization, disinfection, and antisepsis to prevent cross-infection in clinical practice.
- A8. Outline the basics for clinical examination and establishment of a comprehensive patient's dental and medical history in addition to the appropriate investigations to reach proper diagnosis and treatment planning.
- A9. Locate the principles, safety of different types of radiographic techniques, digital radiography and dental photography used in dentistry that aid in the diagnosis and management of patients.
- A10. Describe the sequelae of aging on soft and hard oral and para-oral tissues and their effect on the diagnostic and treatment procedures.
- A11. Outline the types of orofacial pain, their diagnosis, management and prevention as well as the methods of induction and management of potential complications related to sedation, local and general anesthesia.
- A12. Recognize the principles of preventive, interceptive, and corrective orthodontic treatment and the proper time of consultation of an orthodontist.
- A13. Discuss principles of health promotion, dental health education, nutrition, their impacts on dental care and different methods of prevention related to dental diseases for individuals with different age and community levels.
- A14. Discuss different diseases affecting dental, gingival, and periodontal structures, factors contributing to their progress, their management. and precautions to be taken during the dental procedure.
- A15. Identify main medical disorders that may affect dental treatment within the scope of general medicine and surgery and the methods of preventing and management of medical emergencies.
- A16. Recognize the basic principles of exodontia, oral and maxillofacial surgical procedures, implant for management of the diseases and disorders of the oral cavity and teeth.
- A17. Define basic principles and advanced concepts in restorative dentistry, management of pulpal, periodontal disease, trauma, and treatment of failures for different age groups.
- A18. Identify the design and materials used in the fabrication of removable partial and complete dentures, along with the recognition of laboratory equipments, procedures and the problems encountered in clinical and laboratory work.
- A19. Describe the types, classifications, biocompatibility of different functional and aesthetic fixed dental prostheses and overdentures.
- A20. Recognize evidence based, scientific thinking in dental practice and research.

- A21. Identify human rights, its sources, types, and legislative methods to protect it as well as ethical and medico-legal principles which are related to dental practice.
- A22. Recognize social, psychological, and communicational issues relevant to dental care to enhance direct patient contact particularly children and those with special needs.

**2.B. Intellectual skills:**

- B1. Correlate the biomedical principles, as well as dental science with clinical features of different diseases.
- B2. Categorize the potential patient's clinical problems based on the collected data to reach a proper diagnosis and treatment options according to patient's individual needs.
- B3. Formulate an appropriate, sequenced, and prioritized treatment plan which is suitable for all patients especially patients with special needs.
- B4. Distinguish the psychological impacts of anxiety or apprehension on patients, particularly among children, to apply the appropriate behavior management techniques.
- B5. Analyze the problems which are incorporated with the growth, occlusion and development for effective treatment that is aligned with the current evidence.
- B6. Select the appropriate medications on dental management and local anesthetic techniques for various dental procedures.
- B7. Differentiate between normal and abnormal conditions relevant to dental practice in relation to their clinical, radiographic, and histopathologic features
- B8. Assess patient risk for caries, gingival and periodontal diseases and implement their prevention strategies.
- B9. Organize the laboratory procedures used in the fabrication of removable and fixed prosthetic appliances and the causes of their failure.
- B10. Propose the suitable management for dental pain and other problems related to previously treated teeth.
- B11. Select the proper dental materials and equipments used in the different prostheses, restorative and surgical procedures.

**2.C. Professional and practical skills:**

- C1. Carry out an accurate and comprehensive patient's dental and medical, history, using different diagnostic tools and appropriate investigations to develop proper diagnosis and treatment planning.
- C2. Apply complete clinical examination to head and neck, hard and soft oral soft tissue to determine factors contributing to disease progress and its treatment with a satisfactory level of ethical manner.

- C3. Practice laboratory procedures related to physics and dental materials using the proper equipments.
- C4. Illustrate the normal structure of human body organs, systems, and biochemistry and physiology to discover any disorders.
- C5. Illustrate the normal and abnormal histopathological features of teeth, oral tissues, and different tissue of the human body.
- C6. Apply current infection control guidelines for a proper effective and safe environment.
- C7. Illustrate oral & maxillofacial diseases, occlusion disorders, as well as etiological and/or risk factors that may contribute to the disease process.
- C8. Manage acute oral infections and prescription of appropriate pharmaco-therapeutic agents, taking into consideration drug safety and patient factors as well as consultation with other health care professionals when required.
- C9. Perform restoration and pulp therapy for children.
- C10. Perform different procedures in restorative dentistry, and endodontic treatment to restore teeth to form, function and esthetics with proper materials for different age groups.
- C11. Choose the preventive and interceptive measures indicated in the management of occlusal and dentofacial problems during the mixed dentition period.
- C12. Apply different behavioral modification methods for anxious patients of different age groups in the dental practice.
- C13. Practice basic life support measures and deal with dental and medical emergencies which may occur in dental clinic.
- C14. Manage completely and partially edentulous patients with proper prostheses to fulfill their esthetic and functional needs.
- C15. Construct a suitable dental health education and preventive measures of dental and oral diseases for different age groups.
- C16. Apply local anesthesia to control pain and manage patient anxiety and apprehension during different dental procedures.
- C17. Practice teeth extraction and removal of roots, when necessary, as well as dealing with expected complications during surgical procedures.
- C18. Manage different oral mucosal lesions, gingival and periodontal diseases affecting the supporting structures of the teeth.

## **2.D. General and transferable skills:**

- D1. Communicate effectively with patients, their families and with other health professionals involved in their care in multicultural environment verbally and in writing.
- D2. Collaborate with other dental members in a team.
- D3. Develop the capability to self-evaluate professional abilities, performance and progress.
- D4. Employ recent information technology for communication, management of information related to health care.
- D5. Use all available resources to ensure professional, development and lifelong learning.
- D6. Acquire skills in practice management and quality assurance in dental practice.
- D7. Establish priorities and capabilities to overcome stress in the workplace for proper performance.
- D8. Respond to socioeconomic aspects of different communities with effective engagement in community service.
- D9. Demonstrate a creative attitude in an ethical and scientific approach for maintaining patient confidentiality.

## **2. E. Attributes of the Graduates:**

- E1. Practice different treatment modalities in the dental field within the scope of general dentistry.
- E2. Provide comprehensive practice management, patient-centered approach and maintain patients' records in complete and accurate form.
- E3. Demonstrate ethical relationships with staff, patients, and colleagues to develop a mature, sensitive and caring manner.
- E4. Acquire the knowledge and the various skills necessary to provide primary health care to different socio-economic populations.
- E5. Deliver care to patients with self-confidence and communicate effectively with them.
- E6. Commit to lifelong learning in different dental disciplines.
- E7. Utilize the recent advances in dental technologies.
- E8. Apply dental care that complies with the medico-legal principles and code of ethics.
- E9. Perform dental procedures safely and under infection-controlled environment to prevent cross-infection.
- E10. Integrate evidence-based dentistry into practice.
- E11. Realize the limitation of their current knowledge and clinical abilities and the need for proper referral of the patient whenever needed.

**3. Curriculum Structure and Contents:**

**3.a Program Duration:** five levels, ten semesters/two semesters each year

**3.b Program Structure:**

*Total credit hours: 192 CH*

*Faculty Requirements: 177 CH (92.19 %)*

*University Requirements: 11 CH (5.73%)*

*Elective courses: 4 CH (2.08 %)*

Total credit hours:192		
Total Credit Hours	Program%	NARS%
Credit hours of basic sciences courses :(55) CH	28.6 %	28-32%
Didactic credit hours of medical and dental courses:(52) CH	27.0%	21-25%
Laboratory/Clinical credit hours of medical and dental courses:(64) CH	33.3%	33-37%
Complementary sciences credit hours:(10) CH	5.2 %	5-8%
Discretionary sciences credit hours:(11) CH	5.7 %	6-8%

**4. Academic Standards:**

A National Academic Reference Standards (NARS): for dentistry undergraduates offered by the National Authority for Quality Assurance and Accreditation for Education (NAQAAE) 2009 and adopted by the faculty in 9/4/2011 and readopted in 29/12/2018.

**5. Program admission requirements:**

- ✓ Sinai University complies with the Egyptian Supreme Council of universities and the Private University Council of the Ministry of Higher Education.
- ✓ Registration to the Faculty of Dentistry requires the student to have the General Egyptian Secondary Education Certificate or equivalent certificates or degrees approved by the Egyptian ministry of higher education with qualifying grades according to the guidelines put annually by the Ministry of higher education.
- ✓ The faculty from which the student is to be transferred should be accredited by the Egyptian Supreme Council of Universities.

- ✓ Transfer students from other Egyptian or foreign Universities must fulfill all Sinai University Faculty of Dentistry admission requirements. The transferred student must study at least 50% of the syllabus of the Sinai Faculty of Dentistry program.
- ✓ Students arriving from abroad are accepted after the approval of the General Administration for Expatriates and the approval of certificates from the Ministry of Foreign Affairs of the country from which they are arriving. Full dedication to study is also required.
- ✓ Courses completed at another faculty are evaluated for equivalency to Sinai University Faculty of Dentistry.

#### **6. Regulations for progression and program completion:**

- ✓ At the beginning of each semester, students select the courses from the list of the offered courses. The selection of courses for any given year is conditional on the successful completion of the prerequisite courses of the preceding academic year. Students are allowed to add or drop a course or more during a specified time every semester.
- ✓ The academic load in each semester ranges from 18 to 21 credit hours. The academic load in the summer semester is not more than 9 credit hours. Credits acquired by the student are those of passed courses from the registered academic load. This maximum limit for struggling students is reduced to 12 credit hours.
- ✓ Students are allowed to add or drop a course or more during a specified time every semester. The course will carry a grade of “W” and students will be allowed to retake the course when available, and this grade is not included in calculating the student's cumulative average (CGPA). Students who withdraw after the deadline will not be allowed to sit for the relevant exam and will carry a grade of “WF” for that course, and this grade is included in calculating the student's cumulative average (CGPA).
- ✓ Students are expected to attend the university on a full-time basis during each semester. Students must attend at least 75% of the lectures, tutorials, and practical labs. If absence in a course exceeds the allowed percentage (25%) during the first ten weeks of the semester (either excused or unexcused), the student will not be allowed to sit for the exam of the relevant subject and will carry a grade of “F”.
- ✓ English is the official language of instruction; all communication, lectures, coursework, and documentation are performed using the English language. Some courses can be taught in Arabic on the recommendation of the relevant department and the agreement of the faculty and university council.
- ✓ According to University Council approval and Faculty Council approval on 15/9 /2020 blended learning and evaluation were adopted. The College Council may, after taking the opinion of the

- ✓ relevant department council and depending on the nature of the academic courses, decide to teach one or more courses in the hybrid education mode, so that the study in the course will be 70% face-to-face ,and 30% in the distance education system, provided that this is presented to the University Council. To be approved.

### **7. Assessment & Grading Scheme:**

- ✓ The assessment measures the outcome of students' learning in terms of knowledge acquired, understanding developed, and skills gained. Each course is assessed individually upon its completion. Methods of assessment include written, oral and practical examinations, research papers, course assignments, and practical work.
- ✓ Students who fail to achieve 30% of the marks in the final exam and 60% of the total marks of the course will be failed (F).
- ✓ If a student is absent from the final exam for any subject and presents a compelling excuse accepted by the College Council within two days of taking the exam, he will be given a grade of (incomplete) if he obtains at least 60% of the grades for the year's work, otherwise he will be deprived of taking the final exam for this subject. The student must take the exam within two weeks of the start of the next semester, otherwise he will receive a failing grade (F).
- ✓ The student moves from one stage to another after successfully fulfilling the academic requirements and obtaining a cumulative GPA of no less than 2.

### **7.A. Distribution of the Grades.**

Course title	Semester work	Practical / Clinical	Final written	Oral exam	Total marks
Course has written, clinical / practical and oral exam.	30	30	30	10	100
Course has written, clinical / practical without an oral exam	30	30	40	-	100
Theoretical courses, no clinical/practical, oral exam.	50	-	50	-	50
Clinical course has oral exam.	60	-	-	40	100

### 7.B. Grading Scheme:

- Grades are a measure of the performance of a student in an individual course.

Grade	Definition	Percentage (%)	Points
A	Excellent	90-100	4
A-	Excellent	85 to < 90	3,7
B+	Very Good	80 to <85	3,3
B	Very Good	75 to <80	3
B-	Good	72.5 to <75	2.7
C+	Good	70 to <72.5	2.3
C	Good	76.5 to <70	2.0
C-	Good	65 to <67.5	1.7
D+	Satisfactory	62.5 to <65	1,3
D	Satisfactory	60 to < 62.5	1
F	Fail	< 60	, ,
I	Incomplete	< 60	, ,
W	Withdrawal	< 60	, ,
FW	Forced Withdrawal	< 60	, ,

- The grade point average (GPA) is calculated by multiplying the grade value (Points) by the number of credit hours the course represents, the result is called quality points. The total quality points are then divided by the total undertaken credit hours. Repeated courses will be counted once toward the calculation of accumulated credit hours. The best achieved GPA will be used for calculating GPA.
- The cumulative GPA (CGPA) is a calculation of average of all student's grades for all semesters and courses completed up to a given academic term where GPA may only refer to one term.
- The student must re-study the course if he receives a grade of (F). In the event of success, the student's previous grade will be excluded and replaced with the new grade that the student receives when calculating the cumulative average, with the two grades appearing in the student's grades statement.
- Once a student's cumulative GPA falls below "2", he/she is placed under academic probation and a warning is given to him. If the student can't raise his GPA in the following semester, a second warning is given. A student who fails to maintain a minimum cumulative GPA of "2" for four consecutive semesters or six separate semesters will be dismissed from the faculty.

### **8. Internship Training:**

- ✓ Internship field training program is a mandatory year (12months) of rotational training after the completion of the undergraduate dental program and is required to acquire a graduation certificate for completion of the undergraduate dental program and registration as a dental practitioner by the Egyptian Dental Syndicate.
- ✓ All interns are obligated to spend at least 6 months at the Faculty of Dentistry, Sinai University, and the other 6 months at hospitals of the Ministry of Health and/or other universities.
- ✓ Interns are obligated to attend 6 months of comprehensive care clinic (CCC) include 3days weekly for CCC, and one day weekly rotation for Oral maxillofacial surgery, Pediatric dentistry and Oral radiology and diagnosis clinic.

### **9. Teaching and Learning Methods:**

#### ***a. Direct teaching methods:***

- Lectures: these are mainly designed as presentations, providing core knowledge and guidance in subjects being studied.
- Audio-visual presentation techniques will be used to supplement their value.

#### ***b. Interactive teaching methods***

- Group discussion
- Team based learning (TBL)
- Case based learning (CBL)
- Problem solving
- Self- learning: poster- research- assignments- Seminars:  
interactive ways of teaching including a variety of presentations, discussion and simulations. They will emphasize and demonstrate the ideas gained and concepts comprehended and develop communication.
- Role playing

***c. Clinical /Practical Sessions:*** will be used to reinforce a deeper understanding of topics presented in lectures as well as develop students' manual skills and dexterity, transferable skills, and give students adequate experience in handling clinical cases to prepare them for future clinical practice. This includes:

- Clinic / Lab demonstrations
- Laboratory training on simulators (Dummy heads)
- Clinical training.
- Four hands technique
- Comprehensive care clinics
- Audio visual aids

#### ***d. E- Learning***

- Online Lectures
- Group Discussion
- Visual Aids
- Recorded audio.
- Case based learning (CBL)

**10. Students' assessment:**

No	Method	Learning target output
1	Quizzes	Knowledge and Intellectual skills
2	Assignments (Research, Posters, Presentations)	Knowledge, Intellectual skills and General transferable skills
3	Logbook activities	Professional and practical skills & General transferable skills
4	Case-Based Discussion CPD	Professional and practical skills Intellectual & General transferable skills
5	Objective Structured Practical Exam OSPE	Professional and practical skills
6	Objective Structured Clinical Exam OSCE	Professional and practical skills
7	Practical exam in labs (Dummy heads / Simulator)	Professional and practical skills
8	Clinical exam on patients in clinic	Professional and practical skills and General transferable skills
9	Comprehensive care clinics (logbook & oral discussion upon cases presentation)	Knowledge, Intellectual -Professional & practical skills and General transferable skills
10	Oral exam	Knowledge, Intellectual & General transferable skills
11	Written exam / midterm-final exam (MCQ, Short Essay Problem solving questions)	Knowledge and Intellectual skills

**10. Evaluation of program intended learning outcomes:**

Questionnaire for feedback from students assessed courses, lectures demonstrators, and lecturers have collected annually and evaluated to be considered in the action plane for next year.

Evaluator	Tool	Sample
<b>1. Senior students</b>	Questionnaire	<b>Random sample</b>
<b>2. Stakeholders (Employers)</b>	Interview	<b>10</b>
<b>3. External Evaluator(s)</b>	Reports	<b>1</b>
<b>4. Other (Internal Evaluators)</b>	Reports	<b>2</b>

**Program Courses**  
**Level 1**

***Semester (1)***

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DEH 1101	Dental Anatomy and Oral Physiology (1)	2	2	4	3
DEG 1102	Physics	2	2	4	3
DEG 1104	General histology	2	2	4	3
DEG 1105	Human Anatomy (1)	1	2	3	2
LNG 1001	English language	1	4	5	3
HST 1001	Sinai History	1	-	1	1
PHI 1001	Scientific Thinking	1	-	1	1
DEG 1112	First Aid	1	2	3	2
<b>Total</b>					<b>18</b>

L= lecture, P/T= practical/tutorial

***Semester (2)***

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DEH 1201	Dental Anatomy and Oral Physiology (2)	2	2	4	3
DER 1203	Dental Biomaterials (1 )	2	2	4	3
DEG 1205	Human Anatomy (2) Head and Neck	2	2	4	3
DEG 1203	Physiology (1)	1	2	3	2
DEG 1206	General Pathology (1)	1	2	3	2
INT 1001	Introduction to Informatics	2	2	4	3
HUR 1001	Human Rights	1	-	1	1
DEG 1113	Biostatistics	1	-	1	1
<b>Total</b>					<b>18</b>

L= lecture, P/T= practical/tutorial

## Level 2

### *Semester (1)*

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DER 2103	Dental Biomaterials (2)	2	2	4	3
DEH 2102	Oral Biology (1)	2	2	4	3
DEG 2103	Physiology (2)	1	2	3	2
DEG 2106	General Pathology (2)	1	2	3	2
DEG 2101	Biochemistry	2	2	4	3
DEG 2108	Microbiology and Immunology	2	2	4	3
XXXXX	Elective Faculty Requirement	2	-	2	2
<b>Total</b>					<b>18</b>

L= lecture, P/T= practical/tutorial

### *Semester (2)*

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DER 2203	Dental Biomaterials (3)	2	2	4	3
DEH 2202	Oral Biology (2)	2	2	4	3
DEG 2207	Pharmacology	2	2	4	3
DEG 2210	General Surgery and ENT and Ophthalmology	2	2	4	3
DEG 2209	Internal Medicine and Dermatology	2	2	4	3
DEG 2214	Dental Ethics	1	-	1	1
XXXXX	Elective Faculty Requirement	2	-	2	2
<b>Total</b>					<b>18</b>

L= lecture, P/T= practical/tutorial

### Level 3

#### *Semester (1)*

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DER 3101	Preclinical Operative Dentistry (1)	1	4	5	3
DEP 3102	Preclinical Fixed Prosthodontics (1)	1	4	5	3
DEP 3101	Preclinical Removable Prosthodontics (1)	1	4	5	3
DEH 3103	Oral Pathology (1)	2	2	4	3
DEO 3101	Orthodontics (1)	1	2	3	2
DEM 3103	Oral Radiology (1)	1	2	3	2
DEP 3103	Occlusion (1)	1	0	1	1
PHI 1002	Presentation and Communication Skills	1	2	3	2
<b>Total</b>					<b>19</b>

\* L= lecture, P/T= practical/tutorial

#### *Semester (2)*

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DER 3201	Preclinical Operative Dentistry (2)	1	4	5	3
DEP 3202	Preclinical Fixed Prosthodontics (2)	1	4	5	3
DEP 3201	Preclinical Removable Prosthodontics (2)	1	4	5	3
DEH 3203	Oral Pathology (2)	2	2	4	3
DEO 3201	Orthodontics (2)	1	2	3	2
DEM 3203	Oral Radiology (2)	1	2	3	2
DEP 3203	Occlusion (2)	1	2	3	2
DEG 3211	Infection Control	1	-	1	1
<b>Total</b>					<b>19</b>

L= lecture, P/T= practical/tutorial

### Level 4

#### *Semester (1)*

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DER 4101	Clinical Operative Dentistry (1)	1	4	5	3
DEP 4102	Clinical Fixed Prosthodontics (1)	1	4	5	3
DEP 4101	Clinical Removable Prosthodontics (1)	1	4	5	3
DER 4102	Preclinical Endodontics (1)	1	2	3	2
DEM 4102	Diagnosis	1	2	3	2
DEM 4101	Oral Medicine & Periodontology (1)	2	2	4	3
DES 4101	Oral & Maxillofacial Surgery (1)	1	2	3	2
DEO 4103	Dental Public Health	2	-	2	2
<b>Total</b>					<b>20</b>

\*L= lecture, P/T= practical/tutorial

#### *Semester (2)*

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DER 4201	Clinical Operative Dentistry (2)	1	4	5	3
DEP 4202	Clinical Fixed Prosthodontics (2)	1	4	5	3
DEP 4201	Clinical Removable Prosthodontics (2)	1	4	5	3
DER 4202	Preclinical Endodontics (2)	1	2	3	2
DEM 4201	Oral Medicine & Periodontology (2)	2	2	4	3
DES 4201	Oral & Maxillofacial Surgery (2)	1	2	3	2
DEO 4202	Pediatric Dentistry (1)	1	2	3	2
DES 4202	Surgical & Prosthetic Implantology	1	-	1	<b>1</b>
DEP 4204	Geriatric Dentistry	1	-	1	1
<b>Total</b>					<b>20</b>

\*L= lecture, P/T= practical/tutorial

## Level 5

### *Semester (1)*

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DER 5101	Clinical Operative Dentistry (3)	1	2	3	2
DEP 5102	Clinical Fixed Prosthodontics (3)	1	2	3	2
DEP 5101	Clinical Removable Prosthodontics (3)	1	2	3	2
DER 5102	Clinical Endodontics (1)	1	2	3	2
DEM 5101	Oral Medicine & Periodontology (3)	2	2	4	3
DES 5101	Oral & Maxillofacial Surgery (3)	2	2	4	3
DEO 5102	Pediatric Dentistry (2)	1	2	3	2
DER 5104	Comprehensive Care (1)	0	10	10	5
<b>Total</b>					<b>21</b>

\*L= lecture, P/T= practical/tutorial

### *Semester (2)*

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
DER 5201	Clinical Operative Dentistry (4)	1	0	1	1
DEP 5202	Clinical Fixed Prosthodontics (4)	1	0	1	1
DEP 5201	Clinical Removable Prosthodontics (4)	1	0	1	1
DER 5202	Clinical Endodontics (2)	1	2	3	2
DER 5205	Esthetic Dentistry	1	2	3	2
DEM 5201	Oral Medicine & Periodontology (4)	2	2	4	3
DES 5201	Oral & Maxillofacial Surgery (4)	2	2	4	3
DEO 5202	Pediatric Dentistry (3)	1	2	3	2
DER 5204	Comprehensive Care (2)	0	12	12	6
<b>Total</b>					<b>21</b>

\*L= lecture, P/T= practical/tutorial

## Educational Requirements:

### University Requirements

#### -Compulsory Courses (11 credit hours)

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
LNG 1001	English Language	1	4	5	3
INT 1001	Introduction to Informatics	2	2	4	3
HUR 1001	Human Rights	1	-	1	1
HST1001	Sinai History	1	-	1	1
PHI 1001	Scientific Thinking	1	-	1	1
PHI 1002	Presentation and Communication Skills	1	2	3	2
<b>Total</b>					<b>11</b>

\*L= lecture, P/T= practical/tutorial

#### -Elective Courses (4 credit hours)

Course code	Course Title	L	P/T	Total hrs.	Credit hrs
SSG E01	Introduction to Political Science	2	-	2	2
SSG E02	Introduction to Psychology	2	-	2	2
SSG E03	Introduction to Sociology	2	-	2	2
BAD E01	Introduction to Economics	2	-	2	2
BAD E02	Introduction to Business Administration	2	-	2	2
DEE L01	Laser In Dentistry	2	-	2	2
DEE L02	Digital Dentistry	2	-	2	2
DEE L03	Dental Photography	1	2	3	2

\*L= lecture, P/T= practical/tutorial

## Comparison of NARS to Program ILOs (2024-2025)

NARS	Program ILOs
<b>Knowledge and Understanding</b>	
2.1 Interrelationship between different systems of the human body.	<p>A3. Discuss the biomedical basis of human growth as well as anatomy, functions of the head and neck, oral cavity, dentitions, and occlusion as an integral part of general health and diseases.</p> <p>A4. Recognize the functions of different body organs and systems, normal hemostasis, and the mechanism of response to insults including trauma and diseases.</p> <p>A6. Explain the pharmacological properties of drugs used in dental practice including their interactions and side effects which imply safe prescription of the appropriate drug by the dentist.</p>
2.2 The principles of pathogenic mechanisms and manifestations of human diseases which are of dental significance.	<p>A5. Discuss the pathogenesis of infection, inflammation, neoplasia, metabolic disturbances microbiological, immunological, histopathological, and epidemiological aspects of diseases affecting the body, oral and maxillofacial region.</p> <p>A14. Discuss different diseases affecting dental, gingival, and periodontal structures, factors contributing to their progress, their management. and precautions to be taken during the dental procedure.</p>
2.3 Basis and significance of oral health promotion, nutritional education and prevention of oral diseases in population-based approaches.	<p>A12. Recognize the principles of preventive, interceptive, and corrective orthodontic treatment and the proper time of consultation of an orthodontist.</p> <p>A13. Discuss principles of health promotion, dental health education, nutrition, their impacts on dental care and different methods of prevention related to dental diseases for individuals with different age and community levels.</p>
2.4 Prevention and management of the medical emergencies.	<p>A11. Outline the types of orofacial pain, their diagnosis, management and prevention as well as the methods of induction and management of potential complications related to sedation, local and general anesthesia.</p> <p>A15. Identify main medical disorders that may affect dental treatment within the scope of general medicine and surgery</p>

	and the methods of preventing and management of medical emergencies.
2.5 Maintenance of infection control and a safe working environment.	A7. Identify sources of infection and the principles of sterilization, disinfection, and antisepsis to prevent cross-infection in clinical practice.
2.6 Basis of practice management.	<p>A1. Describe the fundamentals of physics for dental education, principles of biostatistics, as well as properties, applications and effective selection of dental biomaterials.</p> <p>A2. Recognize academic English, scientific terminology, and basic principles of informatics skill required for successful and effective engagement in the undergraduate academic community.</p> <p>A8. Outline the basics for clinical examination and establishment of a comprehensive patient's dental and medical history in addition to the appropriate investigations to reach proper diagnosis and treatment planning.</p> <p>A9. Locate the principles, safety of different types of radiographic techniques, digital radiography and dental photography used in dentistry that aid in the diagnosis and management of patients.</p> <p>A10. Describe the sequelae of aging on soft and hard oral and para-oral tissues and their effect on the diagnostic and treatment procedures.</p> <p>A16. Recognize the basic principles of exodontia, oral and maxillofacial surgical procedures, implant for management of the diseases and disorders of the oral cavity and teeth.</p> <p>A17. Define basic principles and advanced concepts in restorative dentistry, management of pulpal, periodontal disease, trauma, and treatment of failures for different age groups.</p> <p>A18. Identify the design and materials used in the fabrication of removable partial and complete dentures, along with the recognition of laboratory equipments, procedures and the problems encountered in clinical and laboratory work.</p> <p>A19. Describe the types, classifications, biocompatibility of different functional and aesthetic fixed dental prostheses and overdentures.</p>
2.7 Principles of evidence- based dentistry and	A20. Recognize evidence based, scientific thinking in dental

its relation to scientific research.	practice and research.
2.8 Ethical and medico-legal aspects relevant to the practice of dentistry and research.	A21. Identify human rights, its sources, types, and legislative methods to protect it as well as ethical and medico-legal principles which are related to dental practice.
2.9 Social and psychological issues relevant to dental care with emphasis on behavioral management.	A22. Recognize social, psychological, and communicational issues relevant to dental care to enhance direct patient contact particularly children and those with special needs.
<b>Intellectual Skills</b>	
4.1. Integrate basic biomedical, behavioral and dental sciences with signs, symptoms and physical findings of the disease.	B1. Correlate the biomedical principles, as well as dental science with clinical features of different diseases.  B4. Distinguish the psychological impacts of anxiety or apprehension on patients, particularly among children, to apply the appropriate behavior management techniques.
4.2. Differentiate between normal and abnormal features that are particularly relevant to dental practice.	B7. Differentiate between normal and abnormal conditions relevant to dental practice in relation to their clinical, radiographic, and histopathologic features.
4.3. Identify, prioritize and generate a list of potential patient's clinical problems.	B2. Categorize the potential patient's clinical problems based on the collected data to reach a proper diagnosis and treatment options according to patient's individual needs.
4.4. Analyze, interpret, and integrate collected diagnostic data to solve clinical problems based on current evidence.	B5. Analyze the problems which are incorporated with the growth, occlusion and development for effective treatment that is aligned with the current evidence.  B8. Assess patient risk for caries, gingival and periodontal diseases and implement their prevention strategies.
4.5. Design appropriate treatment plans for different dental problems.	B3. Formulate an appropriate, sequenced, and prioritized treatment plan which is suitable for all patients especially patients with special needs.  B9. Organize the laboratory procedures used in the fabrication of removable and fixed prosthetic appliances and the causes of their failure.

	B11. Select the proper dental materials and equipments used in the different prostheses, restorative and surgical procedures.
4.6. Assess and evaluate the effects of medications taken by the patient on dental management.	B6. Select the appropriate medications on dental management and local anesthetic techniques for various dental procedures.
4.7. Reason deductively in clinical problem solving.	B10. Propose the suitable management for dental pain and other problems related to previously treated teeth.
<b>Practical and Clinical Skills</b>	
3.1 Establish a comprehensive patient's history, perform clinical examination, request and evaluate appropriate investigations.	C1. Carry out an accurate and comprehensive patient's dental and medical, history, using different diagnostic tools, radiographs and appropriate investigations to develop proper diagnosis and treatment planning. C2. Apply complete clinical examination to head and neck, hard and soft oral soft tissue to determine factors contributing to disease progress and its treatment with a satisfactory level of ethical manner.
3.2 Review the body systems and consult with other health care professionals, when required.	C8. Manage acute oral infections and prescription of appropriate pharmaco-therapeutic agents, taking into consideration drug safety and patient factors as well as consultation 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.	C4. Illustrate the normal structure of human body organs, systems, and biochemistry and physiology to discover any disorders. C5. Illustrate the normal and abnormal histopathological features of teeth, oral tissues, and different tissue of the human body. C7. Illustrate oral & maxillofacial diseases, disorders, as well as etiological and/or risk factors that may contribute to the 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.	C15. Construct a suitable dental health education and preventive measures of dental and oral diseases for different age groups.
3.4.2 Application of different local anesthetic techniques	C16. Apply local anesthesia to control pain and manage patient anxiety and apprehension during different dental procedures.
3.4.3 Extraction of teeth and removal of roots when necessary.	C17. Practice teeth extraction and removal of roots, when necessary, as well as dealing with expected complications during surgical procedures.
3.4.4 Diagnosis of commonly encountered oral lesions.	C2. Apply complete clinical examination to head and neck, hard and soft oral soft tissue to determine factors contributing to disease progress and its treatment with a satisfactory level of ethical manner.
3.4.5 Performance of the necessary radiographs.	C1. Carry out an accurate and comprehensive patient's dental and medical, history, using different diagnostic tools, radiographs and appropriate investigations to develop proper diagnosis and treatment planning.
3.4.6 Performance of non-surgical periodontal treatment and monitor treatment outcomes.	C18. Manage different oral mucosal lesions, gingival and periodontal diseases affecting the supporting structures of the teeth.
3.4.7 Restoration of carious and non-carious tooth defects with emphasis on basic concepts of esthetics.	C10. Perform different procedures in restorative dentistry, and endodontic treatment to restore teeth to form, function and esthetics with proper materials for different age groups.
3.4.8 Basic pedodontics treatment.	C9. Perform restoration and pulp therapy for children.
3.4.9 Rehabilitation of partially and completely edentulous patients.	C3. Practice laboratory procedures related to physics and dental materials using the proper equipments. C14. Manage completely and partially edentulous patients with proper prostheses to fulfill their esthetic and functional needs.
3.4.10 Diagnosis and prevention of developing malocclusions.	C11. Choose the preventive and interceptive measures indicated in the management of occlusal and dentofacial problems during the mixed dentition period.
3.4.11 Basic endodontic procedures	C10. Perform different procedures in restorative dentistry, and endodontic treatment to restore teeth to form, function and esthetics with proper materials for different age groups.

3.5 Apply current infection control guidelines.	C6. Apply current infection control guidelines for a proper effective and safe environment.
3.6 Control different levels of patient's anxiety and apprehension in different age groups.	C12. Apply different behavioral modification methods for anxious patients of different age groups in the dental practice.
3.7 Manage dental and medical emergencies which may occur in dental practice and perform basic life support measures.	C13. Practice basic life support measures and deal with dental and medical emergencies which may occur in dental clinic.
3.8 Prescribe and monitor the effects of appropriate pharmaceutical agents taking into consideration drug and patient factors.	C8. Manage acute oral infections and prescription of appropriate pharmaco-therapeutic agents, taking into consideration drug safety and patient factors as well as consultation with other health care professionals when required.
<b>General and Transferable Skills</b>	
5.1 Work in collaboration as a member of an interdisciplinary team.	D2. Collaborate with other dental members in a team.
5.2 Communicate effectively in multicultural work environment using verbal and non-verbal means.	D1. Communicate effectively with patients, their families and with other health professionals involved in their care in multicultural environment verbally and in writing.
5.3 Recognize and effectively utilize all sources for continuing professional development and life-long learning.	D5. Use all available resources to ensure professional, development and lifelong learning.
5.4 Adopt a creative attitude in an ethical and scientific approach.	D9. Demonstrate a creative attitude in an ethical and scientific approach for maintaining patient confidentiality.
5.5 Self evaluate professional abilities, performance, and progress.	D3. Develop the capability to self-evaluate professional abilities, performance and progress.
5.6 Recognize professional responsibility towards the surrounding community.	D8. Respond to socioeconomic aspects of different communities with effective engagement in community service.
5.7 Use information technologies to enrich diversity and professional experience.	D4. Employ recent information technology for communication, management of information related to health care.
5.8 Recognize the basic concepts of quality assurance and practice management.	D6. Acquire skills in practice management and quality assurance in dental practice

5.9 Prioritize workload and manage personal stress in the framework of proper performance and management.	D7. Establish priorities and capabilities to overcome stress in the workplace for proper performance.
<b>Attributes of the Graduates</b>	
1.1. Deliver independently oral health care services within the scope of general dentistry.	E1. Practice different treatment modalities in the dental field within the scope of general dentistry.
1.2. Provide ethical professional practice including compassion, empathy, integrity, responsibility and tolerance.	E3. Demonstrate ethical relationships with staff, patients, and colleagues to develop a mature, sensitive and caring manner.
1.3. Provide comprehensive practice management encompassing patient assessments and maintain patient's records in complete and accurate forms.	E2. Provide comprehensive practice management, patient-centered approach and maintain patients' records in complete and accurate form. E10. Integrate evidence-based dentistry into practice
1.4. Communicate effectively to develop a mature, sensitive and caring relationship with their patients.	E5. Deliver care to patients with self-confidence and communicate effectively with them.
1.5. Respond to socio-economic aspects of different communities and engage effectively in community services.	E4. Acquire the knowledge and the various skills necessary to provide primary health care to different socio-economic populations.
1.6. Maintain a safe and infection-controlled environment.	E9. Perform dental procedures safely and under infection controlled environment to prevent cross-infection.
1.7. Realize the importance of lifelong learning and strive for continuous professional education.	E6. Commit to lifelong learning in different dental disciplines.
1.8. Recognize the various features of medico-legal aspects of the dental profession.	E8. Apply dental care that complies with the medico-legal principles and code of ethics.
1.9. Recognize the limitation of their current knowledge and clinical abilities and realize the need for proper referral.	E11. Realize the limitation of their current knowledge and clinical abilities and the need for proper referral of the patient whenever needed.
1.10. Evaluate and respond to ongoing dental technology.	E7. Utilize the recent advances in dental technologies.