

DOCTOR OF DENTAL SURGERY (PRACTICING DOCTORATE)

Main Language of Instruction:

French ☒ English ☐ Arabic ☐

Campus Where the Program Is Offered: CSM

OBJECTIVES

The Faculty of Dental Medicine at Saint Joseph University of Beirut is dedicated to training future oral health professionals. Its primary goal is to provide high-quality education, combine theoretical knowledge and practical skills, and train students to become competent and ethical dentists. The Faculty aims to transmit knowledge in biomedical sciences, oral anatomy, dental pathology, and diagnostic techniques. It also aims to develop students' advanced clinical skills, enabling them to prevent and diagnose dental diseases and plan and execute complex dental treatments.

In addition to academic training, the Faculty promotes scientific research in dental medicine. Students are encouraged to participate in research projects, thus contributing to the advancement of knowledge and the improvement of clinical practices. This research often leads to new techniques, technologies, and treatment methodologies that directly benefit dental care.

Alongside its educational and research roles, the Faculty of Dental Medicine houses a Dental Care Center that offers clinical services to the local community. It provides a practical environment for students in clinical training, and aims to provide quality dental care, promoting oral health, and raising awareness about the importance of preventive care. By integrating clinical practice into the educational environment, the Faculty aims to ensure that students gain significant practical experience while addressing the oral health needs of the community.

PROGRAM LEARNING OUTCOMES (COMPETENCIES)

- Mobilize knowledge acquired from fundamental medical sciences, technological sciences, and artificial intelligence for application in dental practice, particularly for the diagnosis, modeling, and understanding of oral and dental pathologies.
- Plan oral and dental treatment based on diagnosis, artificial intelligence tools, and prognosis, while considering the patient's psychological, social, and economic conditions.
- Provide preventive and curative dental care adapted to the patient's needs and specific characteristics, integrating AI technologies for personalized prevention, intelligent monitoring, and optimization of care.
- Communicate effectively with all stakeholders involved in the dental profession, including through the use of digital and intelligent tools.
- Manage a dental practice in compliance with ergonomic, safety, and aseptic standards recommended by international health authorities, integrating intelligent systems for management, data protection, and workflow organization.
- Practice dentistry in accordance with ethical principles, legal regulations, and professional standards, while considering issues related to artificial intelligence and health data confidentiality.
- Self-manage professional development, analytical thinking, and innovation across all domains, particularly in technological and digital fields, including artificial intelligence.
- Contribute to the improvement of oral public health in accordance with national and international health policies, integrating AI tools for prevention, epidemiological surveillance, and community engagement.

PROGRAM REQUIREMENTS

300 credits: Required courses (282 credits), Institution's elective courses (12 credits), Open elective courses (6 credits) and USJ General Education Program (31 credits - may be part of the above categories).

Fundamental Courses (294 Cr.)

Required Courses (282 Cr.)

Volunteering and Civic Action (2 Cr.). Article Analysis (1 Cr.). Dental Anatomy 1 (1 Cr.). Dental Anatomy 2 (1



Cr.). General Human Anatomy 1 (2 Cr.). General Human Anatomy 2 (2 Cr.). General Human Anatomy 3 (2 Cr.). Topographical General Human Anatomy: Head and Neck (2 Cr.). Pathological Anatomy (2 Cr.). General Anesthesia & Outpatient Anesthesia (1 Cr.). Local Anesthesia + Exodontia (2 Cr.). Medical and Dental English 1 (1 Cr.). Medical and Dental English 2 (2 Cr.). Application of New Digital and Artificial Technologies (1 Cr.). Fundamental and Therapeutic Orthodontics + Clinic (3 Cr.). Clinical & Metabolic Biochemistry (2 Cr.). Structural Biochemistry (2 Cr.). Cell Biology (2 Cr.). Molecular Biology (1 Cr.). General Chemistry (2 Cr.). Organic Chemistry (2 Cr.). Oral Surgery (2 Cr.). Oral Surgery Clinic 1 (1 Cr.). Oral Surgery Clinic 2 (1 Cr.). Oral Surgery Clinic 3 (2 Cr.). Oral Surgery Clinic 4 (1 Cr.). Pediatric Dentistry Clinic 1 (2 Cr.). Pediatric Dentistry Clinic 2 (2 Cr.). Restorative Dentistry Clinic 1 (Multidisciplinary Mode) (2 Cr.). Restorative Dentistry Clinic 2 (Multidisciplinary Mode) (2 Cr.). Restorative Dentistry Clinic 3 (Multidisciplinary Mode) (2 Cr.). Restorative Dentistry Clinic 4 (Multidisciplinary Mode) (2 Cr.). Digital Dentistry and Artificial Intelligence Clinic 1 (1 Cr.). Digital Dentistry and Artificial Intelligence Clinic 2 (1 Cr.). Endodontics Clinic 1 (Multidisciplinary Mode) (3 Cr.). Endodontics Clinic 2 (Multidisciplinary Mode) (2 Cr.). Endodontics Clinic 3 (Multidisciplinary Mode) (3 Cr.). Endodontics Clinic 4 (Multidisciplinary Mode) (3 Cr.). Oral Medicine Clinic 1 (Multidisciplinary Mode) (1 Cr.). Oral Medicine Clinic 2 (Multidisciplinary Mode) (2 Cr.). Oral Medicine and Radiology Clinic (1 Cr.). Oral Medicine and Radiology Clinic 1 (Multidisciplinary Mode) (1 Cr.). Oral Medicine and Radiology Clinic 2 (Multidisciplinary Mode) (1 Cr.). Multi Clinic: Tutoring + Infection Control (1 Cr.). Orthodontics Clinic 1 (1 Cr.). Orthodontics Clinic 2 (1 Cr.). Periodontology Clinic 1 (Multidisciplinary Mode) (2 Cr.). Periodontology Clinic 2 (Multidisciplinary Mode) (2 Cr.). Periodontology Clinic 3 (Multidisciplinary Mode) (2 Cr.). Periodontology Clinic 4 (Multidisciplinary Mode) (2 Cr.). Removable Prosthesis Clinic 1 (2 Cr.). Removable Prosthesis Clinic 2 (2 Cr.). Fixed Prosthesis Clinic 1 (3 Cr.). Fixed Prosthesis Clinic 2 (3 Cr.). Fixed Prosthesis Clinic 4 (3 Cr.). Fixed Prosthesis Clinic 3 + Occlusion (Multidisciplinary Mode) (3 Cr.). Radiology Clinic 1 (1 Cr.). Radiology Clinic 2 (1 Cr.). Accounting and Introduction to Financial Statements (1 Cr.). Infection Control and Ergonomics (1 Cr.). Community Dentistry (1 Cr.). Digital Dentistry (1 Cr.). Digital Dentistry and Artificial Intelligence (1 Cr.). Restorative Dentistry (1 Cr.). Restorative and Aesthetic Dentistry 1 (1 Cr.). Restorative and Aesthetic Dentistry 2 (1 Cr.). Dental Development and Histology 1 (2 Cr.). Dental Development and Histology 2 (1 Cr.). Research Protocol Development (1 Cr.). Endodontics 1 (2 Cr.). Endodontics 2 (1 Cr.). Endodontics 3 (2 Cr.). Entrepreneurship in Healthcare (1 Cr.). Environment and Biodiversity (1 Cr.). Epidemiology and Applied Biostatistics in Dentistry (1 Cr.). Ethics and Dentistry (2 Cr.). Fundamental Ethics (2 Cr.). Expression and Communication 1 (2 Cr.). Expression and Communication 2 (2 Cr.). Conflict Management in the Medical-Dental Field (2 Cr.). Management of Health Facilities & Economy (2 Cr.). Stress and Communication Management in the Dental Office (1 Cr.). Practical and Operational Management of the Dental Office (1 Cr.). Hematology and Immunology (2 Cr.). Histology (2 Cr.). Surgical Implantology (1 Cr.). Applied Informatics in Dentistry (2 Cr.). Introduction to Research in Dentistry (1 Cr.). Innovation + Hands-on 1 (1 Cr.). Innovation + Hands-on 2 (1 Cr.). Artificial Intelligence and Digital Technologies in the Medical Field (1 Cr.). Radiological Interpretation (1 Cr.). Introduction to Multidisciplinary Clinic (1 Cr.). Introduction to Bibliographic Research (1 Cr.). Arabic Language and Media (2 Cr.). Multidisciplinary Geriodontology (1 Cr.). Coaching Approach to Career Success (2 Cr.). Legislation on Dental Practice in Lebanon (in Arabic) (1 Cr.). Fundamentals of Financial Analysis (1 Cr.). USJ Values in Daily Life (2 Cr.). Dental Materials 1 (1 Cr.). Dental Materials 2 (1 Cr.). Dental Materials 3 (1 Cr.). Mathematics (2 Cr.). Forensic Medicine (1 Cr.). Thesis and Defense (3 Cr.). Scientific Writing Methodology (1 Cr.). General Microbiology (2 Cr.). Specific and Oral Microbiology + Hands-on (3 Cr.). Clinical Observation 1 (1 Cr.). Clinical Observation 2 (2 Cr.). Clinical Observation 3 (2 Cr.). Clinical Observation 4 (2 Cr.). Occlusodontics 1 (1 Cr.). Occlusodontics 2 (1 Cr.). Pediatric Odontology 1 (1 Cr.). Pediatric Odontology 2 (1 Cr.). Professional Organization (in Arabic) (1 Cr.). Periodontology 1 (2 Cr.). Periodontology 2 (2 Cr.). Dental Pathology 1 (2 Cr.). Dental Pathology 2 (2 Cr.). Maxillofacial Pathology and Surgery (1 Cr.). Oral and Surgical Pathology (2 Cr.). Pharmacology (2 Cr.). Physiology 1 (2 Cr.). Physiology 2 (1 Cr.). Special Physiology (3 Cr.). Physics (2 Cr.). Portfolio (2 Cr.). Case Presentation (2 Cr.). Interprofessional Clinical Case Presentation (1 Cr.). Oral, Written, and Portfolio Probation (2 Cr.). Thesis Project (1 Cr.). Removable Prosthesis 1 (1 Cr.). Removable Prosthesis 2 (1 Cr.). Removable Prosthesis 3 (2 Cr.). Removable Prosthesis (2 Cr.). Fixed Prosthesis (1 Cr.). Fixed Prosthesis Plural (2 Cr.). Single Fixed Prosthesis (1 Cr.). Implant Prosthesis + Hands-on (2 Cr.). Medical Psychology (1 Cr.). Public Speaking (1 Cr.). Radiology and Radioprotection (2 Cr.). Problem Solving APP 1 (2 Cr.). Problem Solving APP 2 (1 Cr.). Clinical Rotation (2 Cr.). Pathological Semiotics 1 (1 Cr.). Pathological Semiotics 2 (2 Cr.). Emergency Care 1 (in Arabic) (1 Cr.). Emergency Care 3 (in Arabic) (1 Cr.). Emergency Care 2 + Hands-on (in Arabic) (1 Cr.). Dental Anatomy Hands-on 1 (2 Cr.). Dental Anatomy Hands-on 2 (2 Cr.). Pathological Anatomy Hands-on (1 Cr.). Biology + Histology Hands-on (1 Cr.). Community Hands-on (1 Cr.). Digital Dentistry Hands-on (1 Cr.). Restorative Dentistry Hands-on 1 (1 Cr.). Restorative Dentistry Hands-on 2 (1 Cr.). Restorative Dentistry Hands-on 3 (2 Cr.). Restorative Dentistry Hands-on 4 (3 Cr.). Dental Development and Histology Hands-on (1 Cr.). Endodontics Hands-on 1 (2 Cr.). Endodontics Hands-on 2 (2 Cr.). Ergonomics and Infection Control Hands-on (2 Cr.). Occlusodontics Hands-on (1 Cr.). Pediatric Dentistry Hands-on (1 Cr.). Periodontology Hands-on (1 Cr.). Removable

Prosthesis Hands-on 1 (2 Cr.). Removable Prosthesis Hands-on 2 (1 Cr.). Removable Prosthesis Hands-on 3 (1 Cr.). Removable Prosthesis Hands-on 4 (1 Cr.). Fixed Prosthesis Hands-on 1 (2 Cr.). Fixed Prosthesis Hands-on 2 (2 Cr.). Fixed Prosthesis Course Hands-on 1 (1 Cr.). Fixed Prosthesis Course Hands-on 2 (2 Cr.). Acrylic Partial Prosthesis Hands-on 1 (1 Cr.). Acrylic Partial Prosthesis Hands-on 2 (1 Cr.).

Institution's Elective Courses (12 Cr.), to be chosen from the list below:

Nutrition and Oral Health (2 Cr.). Basics of Etiquette (1 Cr.). Awareness of Anxiety (1 Cr.). Genetics (1 Cr.). Introduction to Photography (2 Cr.). Back Pain: Etiology and Prevention (1 Cr.). General Biology (2 Cr.). Psychosocial Aspects of Health (1 Cr.). Digital Text Editing (2 Cr.). Nanotechnology Investment in Medical-Dental Import and Export (1 Cr.). Body and Oral Health of Young Adults (2 Cr.). Faith Versus Science (2 Cr.). Speech Between Experience and Expression (2 Cr.). Confessionalism in Lebanon (2 Cr.). Lebanese Issues (in Arabic) (2 Cr.).

Open Elective Courses (6 Cr.)

USJ General Education Program (31 Cr.)

Code	Course Name	Credits
	ENGLISH OR OTHER LANGUAGE	4
003ANGAS4	English Level A	4
	ARABIC	2
	<i>Arabic Language and Culture</i>	2
435LALML2	Arabic Language and Media	2
	HUMANITIES	8
064VALEL1	USJ Values in Daily Life	2
	<i>Ethics</i>	2
018ETHIL1	Fundamental Ethics	2
	<i>Civic Engagement and Citizenship</i>	2
015ABC2L3	Volunteering and Civic Action	2
	<i>Other Humanities Course</i>	2
003GCDMI2	Conflict Management in the Medical-Dental Field	2
	SOCIAL SCIENCES	6
	<i>Professional Integration and/or Entrepreneurship</i>	2
003COATI2	Coaching Approach to Career Success	2
	<i>Other Social Sciences Courses</i>	4
003GDESI6	Management of Health Facilities & Economy	2
003FDAFS3	Fundamentals of Financial Analysis	1
003CIEFS2	Accounting and Introduction to Financial Statements	1
	QUANTITATIVE TECHNIQUES	6
003MATSI1	Mathematics	2
003INFOI2	Applied Informatics in Dentistry	2
003IATNI2	Artificial Intelligence and Digital Technologies in the Medical Field	1
003EPSTI2	Epidemiology and Applied Biostatistics in Dentistry	1
	COMMUNICATION TECHNIQUES	5
003EXCOI1	Expression and Communication 1	2
003EXC2I2	Expression and Communication 2	2

003PUSPI4	Public Speaking	1
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SUGGESTED STUDY PLAN

Semester 1

Code	Course Name	Credits
015ABC2L3	Volunteering and Civic Action	2
003ANDEI1	Dental Anatomy 1	1
003AHG1I1	General Human Anatomy 1	2
003BICLI1	Cell Biology	2
003CHIGI1	General Chemistry	2
003ENLI1	Lebanese Issues (in Arabic)	2
003EVBII1	Environment and Biodiversity	1
018ETHIL1	Fundamental Ethics	2
003EXCOI1	Expression and Communication 1	2
003INRBI1	Introduction to Bibliographic Research	1
435LALML2	Arabic Language and Media	2
003MATSI1	Mathematics	2
003OBCLI1	Clinical Observation 1	1
003PHYOI1	Physiology 1	2
003PHYSI1	Physics	2
003SOIUI1	Emergency Care 1 (in Arabic)	1
003TPADI1	Dental Anatomy Hands-on 1	2
	Institution's Elective Course	2
	Open Elective Course	2
	Total	31

Semester 2

Code	Course Name	Credits
003ANDEI2	Dental Anatomy 2	1
003AHG2I2	General Human Anatomy 2	2
003BIMOI2	Molecular Biology	1
003CORGI2	Organic Chemistry	2
003EPSTI2	Epidemiology and Applied Biostatistics in Dentistry	1
003EXC2I2	Expression and Communication 2	2
003GCDMI2	Conflict Management in the Medical-Dental Field	2
003HISTI2	Histology	2
003INFOI2	Applied Informatics in Dentistry	2
003IATNI2	Artificial Intelligence and Digital Technologies in the Medical Field	1
003COATI2	Coaching Approach to Career Success	2
064VALEL1	USJ Values in Daily Life	2

003OBCL12	Clinical Observation 2	2
003PHYS12	Physiology 2	1
003TPAD12	Dental Anatomy Hands-on 2	2
003TPBH12	Biology + Histology Lab	1
	Institution's Elective Course	1
	Open Elective Course	2
	Total	29

Semester 3

Code	Course Name	Credits
003AHG313	General Human Anatomy 3	2
003ANGL13	Medical and Dental English 1	1
003BIOS13	Structural Biochemistry	2
003COIE13	Infection Control and Ergonomics	1
003DED113	Digital Dentistry	1
003DENR13	Restorative Dentistry	1
003DEH113	Dental Development and Histology 1	2
003GSTRI3	Stress and Communication Management in the Dental Office	1
003MATDI3	Dental Materials 1	1
003MICGI3	General Microbiology	2
003OCL113	Clinical Observation 3	2
003PHYS13	Special Physiology	3
003PROA13	Removable Prosthesis	2
003PRFUI3	Fixed Prosthesis Course	1
003PSYMI3	Medical Psychology	1
003SEME13	Pathological Semiotics 1	1
003TPDR13	Restorative Dentistry Hands-on 1	1
003TPPF13	Single Fixed Prosthesis Hands-on 1	1
003TPPA13	Acrylic Partial Prosthesis Hands-on 1	1
	Institution's Elective Course	2
	Open Elective Course	2
	Total	31

Semester 4

Code	Course Name	Credits
003AHGT14	Topographical General Human Anatomy: Head and Neck	2
003ANGL14	Medical and Dental English 2	2
003BIMCI4	Clinical & Metabolic Biochemistry	2
003DEPCI4	Community Dentistry	1
003DER214	Restorative and Aesthetic Dentistry 1	1
003DEH114	Dental Development and Histology 2	1

003HÉMI4	Hematology and Immunology	2
003INREI4	Introduction to Research in Dentistry	1
003MATDI4	Dental Materials 2	1
003OCLI4	Clinical Observation 4	2
003PATDI4	Dental Pathology 1	2
003PUSPI4	Public Speaking	1
003APPRI4	Problem Solving APP 1	2
003SÉMPI4	Pathological Semiotics 2	2
003TPDRI4	Restorative Dentistry Hands-on 2	1
003TPDHI4	Dental Development and Histology Hands-on	1
003TPPFI4	Fixed Prosthesis Course Hands-on 2	2
003TPPAI4	Acrylic Partial Prosthesis Hands-on 2	1
	Institution's Elective Course	2
	Total	29

Semester 5

Code	Course Name	Credits
003DDIAI5	Digital Dentistry and Artificial Intelligence	1
003DERI5	Restorative and Aesthetic Dentistry 2	1
003ENDOI5	Endodontics 1	2
003INSMI5	Introduction to Multidisciplinary Clinic	1
003MATDI5	Dental Materials 3	1
003PAROI5	Periodontology 1	2
003PATDI5	Dental Pathology 2	2
003PRAI5	Removable Prosthesis 1	1
003PRFPI5	Fixed Prosthesis Plural	2
003RADII5	Radiology and Radioprotection	2
003APPRI5	Problem Solving APP 2	1
003TPRI5	Restorative Dentistry Hands-on 3	2
003TPEI5	Endodontics Hands-on 1	2
003TPECI5	Ergonomics and Infection Control Hands-on	1
003TPAI5	Removable Prosthesis Hands-on 1	2
003TPPFI5	Fixed Prosthesis Hands-on 1	2
	Institution's Elective Course	1
	Open Elective Course	2
	Total	29

Semester 6

Code	Course Name	Credits
003ANAPI6	Pathological Anatomy	2
003AGAMI6	General Anesthesia & Outpatient Anesthesia	1

003ALEXI6	Local Anesthesia + Exodontia	2
003CLDGI6	Oral Medicine and Radiology Clinic	1
003END2I6	Endodontics 2	1
003ENHEI6	Entrepreneurship in Healthcare	1
003GDESI6	Management of Health Facilities & Economy	2
003MERSI6	Methodology of Scientific Writing	1
003MICRI6	Specific and Oral Microbiology + Hands-on	3
003OCCLI6	Occlusodontics 1	1
003PRA2I6	Removable Prosthesis 2	1
003ROCLI6	Clinical Rotation	2
003SOIUI6	Emergency Care 2 + Hands-on (in Arabic)	1
003TPAPI6	Pathological Anatomy Hands-on	1
003TPR2I6	Restorative Dentistry Hands-on 4	3
003TPE2I6	Endodontics Hands-on 2	2
003TPOCI6	Occlusodontics Hands-on	1
003TPPAI6	Periodontology Hands-on	1
003TPA2I6	Removable Prosthesis Hands-on 2	1
003TPFI6	Fixed Prosthesis Hands-on 2	2
	Institution's Elective Courses	2
	Total	32

Semester 7

Code	Course Name	Credits
003CHORS1	Oral Surgery	2
003CCO1S1	Oral Surgery Clinic 1	1
003CLD1S1	Restorative Dentistry Clinic 1 (Multidisciplinary Mode)	2
003CEN1S1	Endodontics Clinic 1 (Multidisciplinary Mode)	3
003CMORS1	Oral Medicine and Radiology Clinic 1 (Multidisciplinary Mode)	1
003CLP1S1	Periodontology Clinic 1 (Multidisciplinary Mode)	2
003CPC1S1	Fixed Prosthesis Clinic 1	3
003ENDOS1	Endodontics 3	2
003IMPCS1	Surgical Implantology	1
003INNOS1	Innovation + Hands-on 1	1
003INRAS1	Radiological Interpretation	1
003ODOPS1	Pediatric Odontology 1	1
003PAROS1	Periodontology 2	2
003PATOS1	Oral and Surgical Pathology	2
003PHARS1	Pharmacology	2
003PRA1S1	Removable Prosthesis 3	2
003PRCFS1	Fixed Prosthesis	1

003TPOPS1	Pediatric Odontology Hands-on	1
003TPA1S1	Removable Prosthesis Hands-on 3	1
	Total	31

Semester 8

Code	Course Name	Credits
003ATNAS2	Application of New Digital and Artificial Technologies	1
003BFTHS2	Fundamental and Therapeutic Orthodontics + Clinic	3
003CCO2S2	Oral Surgery Clinic 2	1
003CLD2S2	Restorative Dentistry Clinic 2 (Multidisciplinary Mode)	2
003CEN2S2	Endodontics Clinic 2 (Multidisciplinary Mode)	2
003CMORS2	Oral Medicine and Radiology Clinic 2 (Multidisciplinary Mode)	1
003CLP2S2	Periodontology Clinic 2 (Multidisciplinary Mode)	2
003CPC2S2	Fixed Prosthesis Clinic 2	3
003CIEFS2	Accounting and Introduction to Financial Statements	1
003PRORS2	Research Protocol Development	1
003MRCPS2	Practical and Operational Management of the Dental Office	1
003INNOS2	Innovation + Hands-on 2	1
003OCCLS2	Occlusodontics 2	1
003ODOPS2	Pediatric Odontology 2	1
003PORTS2	Portfolio	2
003PITPS2	Implant Prosthesis + Hands-on	2
003TPCOS2	Community Hands-on	1
003TPDDS2	Digital Dentistry Hands-on	1
003TPE3S2	Endodontics Hands-on	1
003TPA2S2	Removable Prosthesis Hands-on 4	1
	Total	29

Semester 9

Code	Course Name	Credits
003ANARS3	Article Analysis	1
003CCO1S3	Oral Surgery Clinic 3	2
003CDP1S3	Pediatric Dentistry Clinic 1	2
003CDR1S3	Restorative Dentistry Clinic 3 (Multidisciplinary Mode)	2
003CDIAS3	Digital Dentistry and Artificial Intelligence Clinic 1	1
003CEN1S3	Endodontics Clinic 3 (Multidisciplinary Mode)	3
003CMO1S3	Oral Medicine Clinic 1 (Multidisciplinary Mode)	1
003CLO1S3	Orthodontics Clinic 1	1
003CLP1S3	Periodontology Clinic 3 (Multidisciplinary Mode)	2
003CPA1S3	Removable Prosthesis Clinic 1	2

003CPC1S3	Fixed Prosthesis Clinic 3 + Occlusion (Multidisciplinary Mode)	3
003CLRAS3	Radiology Clinic 1	1
003ETHDS3	Ethics and Dentistry	2
003GEROS3	Multidisciplinary Geriodontology	1
003FDAFS3	Fundamentals of Financial Analysis	1
003ORPLS3	Professional Organization (in Arabic)	1
003PCMFS3	Maxillofacial Pathology and Surgery	1
003PRESS3	Case Presentation	2
003PRMES3	Thesis Project	1
	Total	30

Semester 10

Code	Course Name	Credits
003CCHOS4	Oral Surgery Clinic 4	1
003CDP2S4	Pediatric Dentistry Clinic 2	2
003CDR2S4	Restorative Dentistry Clinic 4 (Multidisciplinary Mode)	2
003CDIAS4	Digital Dentistry and Artificial Intelligence Clinic 2	1
003CEN2S4	Endodontics Clinic 4 (Multidisciplinary Mode)	3
003CMO2S4	Oral Medicine Clinic 2 (Multidisciplinary Mode)	2
003MTCIS4	Multi Clinic: Tutoring + Infection Control	
003CLO2S4	Orthodontics Clinic 2	1
003CLP2S4	Periodontology Clinic 4 (Multidisciplinary Mode)	2
003CPA2S4	Removable Prosthesis Clinic 2	2
003CPC2S4	Fixed Prosthesis Clinic 4	3
003CLRAS4	Radiology Clinic 2	1
003LSPDS4	Legislation on Dental Practice in Lebanon (in Arabic)	1
003MLEGS4	Forensic Medicine	1
003MESOS4	Thesis and Defense	3
003PCIPS4	Interprofessional Clinical Case Presentation	1
003POEBS4	Oral, Written, and Portfolio Probation	2
003SOIUS4	Emergency Care 3 (in Arabic)	1
	Total	30

COURSE DESCRIPTION

015ABC2L3	Volunteering and Civic Action	2 Cr.
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This course promotes students' active participation in civic life through a combination of theoretical instruction and supervised volunteer activities. It encourages civic engagement by providing students with opportunities to contribute to their communities through various forms of volunteer work.

003ANARS3	Article Analysis	1 Cr.
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This course covers the principles and methods of scientific research in oral surgery and, more broadly, in dental sciences. Through seminars and practical workshops, students will learn to critically analyze a multidisciplinary

scientific article, evaluate its methodological and scientific validity, and assess the relevance of its results for reasoned clinical application. This course also introduces students to the different stages of the literature review process, including formulating a scientific question, conducting a bibliographic search, analyzing the methodology of a study, interpreting results, and assessing the level of evidence. It thus contributes to the development of evidence-based dental practice, critical thinking, and informed clinical decision-making skills.

003ANDEI1	Dental Anatomy 1	1 Cr.
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This course introduces the descriptive, topographic, comparative, and functional anatomy of permanent teeth, providing essential knowledge for dental practice and the morphological restoration of altered or missing teeth across dental specialties. Through lectures and interactive tutorial sessions, students will study dental morphology using computer-assisted presentations and Tooth Atlas 8 software, which provides three-dimensional visualization of tooth anatomy and reinforces their understanding of dental structures.

003ANDEI2	Dental Anatomy 2	1 Cr.
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This course introduces the descriptive, topographic, comparative, and functional anatomy of permanent teeth, providing essential knowledge for dental practice and the morphological restoration of altered or missing teeth across dental specialties. Through lectures and interactive tutorial sessions, students will study dental morphology using computer-assisted presentations and Tooth Atlas 8 software, which provides three-dimensional visualization of tooth anatomy and reinforces their understanding of dental structures.

003AHG1I1	General Human Anatomy 1	2 Cr.
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This course introduces the anatomy of human structures, with a focus on the bony structures of the head and neck. It presents these structures using international anatomical nomenclature (PNA) and the specialized terminology of anatomy. Students will learn to identify and describe in detail the bones and cavities of the human skull and recognize their anatomical features.

003AHG2I2	General Human Anatomy 2	2 Cr.
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This course introduces the systematic anatomy of the muscular and vascular systems, with particular emphasis on the orofacial region. Students will learn to identify and describe the muscles and muscle groups of the head and neck, as well as their vascular networks.

003AHG3I3	General Human Anatomy 3	2 Cr.
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This course introduces the anatomy of the central nervous system, cranial nerves, and major body cavities. Students will learn to describe the motor and sensory pathways associated with the cavities of the head, as well as the major body cavities and the anatomical relationships among the organs they contain.

003AHGTI4	Topographic General Human Anatomy: Head and Neck	2 Cr.
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This course covers the topographic description of the different orofacial regions and of the neck. Students will synthesize the knowledge acquired in head and neck anatomy and describe, through an anatomical approach, the oral and maxillofacial surgical techniques and imaging results.

003ANAPI6	Pathological Anatomy	2 Cr.
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This course enables students to understand the methodology in anatomic pathology, and recognize the main disease processes in general anatomic pathology and their applications to oral and salivary tissues and organs.

003AGAMI6	General Anesthesia & Outpatient Anesthesia	1 Cr.
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This course enables students to describe the principles of general anesthesia and identify its potential risks and complications.

003ALEXI6	Local Anesthesia + Exodontics	2 Cr.
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This course covers local anesthesia techniques and the principles of exodontics (dental extraction). Students



will learn how to effectively administer local anesthesia, prepare patients for dental extractions, and manage intraoperative and postoperative complications.

003ANGLI3	Medical and Dental English 1	1 Cr.
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This course introduces the English language skills and terminology essential to the practice of dental medicine. It covers medical terminology and concepts relevant to dentistry, as well as the language and conventions of scientific writing. The course develops students' ability to understand and communicate effectively in English in academic and professional dental contexts, with emphasis on oral and written comprehension and communication.

003ANGLI4	Medical and Dental English 2	2 Cr.
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This course introduces the English language skills and terminology essential to the practice of dental medicine. It covers medical terminology and concepts relevant to dentistry, as well as the language and conventions of scientific writing. The course develops students' ability to understand and communicate effectively in English in academic and professional dental contexts, with emphasis on oral and written comprehension and communication.

003ATNAS2	Application of New Digital and Artificial Technologies	1 Cr.
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This course presents the fundamental principles and clinical applications of digital technologies used in modern dentistry. It covers digital imaging systems, including CBCT and intraoral scanners, as well as computer-aided design and manufacturing (CAD/CAM) workflows for dental restorations and appliances. The course also addresses digital implant planning guided by prosthetic projects, guided surgery, additive manufacturing (3D printing), and digital workflows in orthodontics, such as clear aligners and indirect bonding. Emphasis is placed on the indications, advantages, limitations, and clinical integration of these technologies in diagnosis and treatment planning.

003APDSI2	Psychosocial Aspects of Health	1 Cr.
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This course examines the importance of physical and mental health in promoting professional success and positive social relationships.

003BFTHS2	Fundamental and Therapeutic Orthodontics + Clinic	3 Cr.
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This course introduces the fundamentals of orthodontics. Students will learn to identify abnormalities in the development of the dentition and occlusion, understand their main etiologies, and describe the principles of preventing, intercepting, and correcting malocclusions. The course covers the fundamentals of orthodontic diagnosis, including clinical examination, cephalometric analysis, and space analysis. It also introduces digital orthodontics, clear aligner therapy, and applications of artificial intelligence in orthodontics. Practical sessions complement the theoretical content through exercises in cephalometry, model analysis, space analysis, and the use of digital orthodontic tools, preparing students to establish an appropriate orthodontic diagnosis.

003BIMCI4	Clinical and Metabolic Biochemistry	2 Cr.
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This course introduces diagnostic biochemistry. It covers the process of a blood test, from collection to results, and includes guidelines for diagnosing certain diseases and biochemical blood markers such as diabetes, liver function disorders, and acid-base imbalances.

003BIOSI3	Structural Biochemistry	2 Cr.
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This course covers the structure and role of macromolecules found in a living animal cell, including proteins, sugars, lipids and nucleic acids.

003BICLI1	Cell Biology	2 Cr.
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This course introduces the structure and organization of prokaryotic and eukaryotic cells and the methods used to study their components. It covers cell observation techniques, including light and electron microscopy, their underlying principles, and methods of sample preparation and staining. The course examines cellular structures and organelles, including mitochondria, the nucleus and nucleolus, nuclear membrane, smooth and rough endoplasmic reticulum, Golgi apparatus, lysosomes, and peroxisomes, with emphasis on their functions,





compartmentalization, and molecular composition. It also covers cell junctions, the cytoskeleton and related structures such as cilia and flagella, and the cell cycle.

003BIOGl4	General Biology	2 Cr.
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This course introduces the fundamental principles of biology for students in the life and health sciences, including medicine, dental medicine, and pharmacy. It explores the diversity of living organisms and microorganisms, enabling students to distinguish among bacteria, viruses, protozoa, and other microorganisms and understand their characteristics and roles. The course also examines key features of living organisms, including reproduction, adaptation, and evolution, and introduces biological processes and conditions associated with cancer and aging.

003BIMOl2	Molecular Biology	1 Cr.
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This course introduces the fundamental principles of molecular biology and their relevance to the medical sciences, drawing on concepts from biochemistry and genetics. Building on the structure and properties of nucleic acids, it examines the mechanisms involved in the transmission and repair of genetic material, as well as gene expression and its regulation. Students will also learn to interpret experimental results obtained using common molecular biology techniques applied to biomedical research and the analysis of genetic material in medical laboratories.

003CHIGl1	General Chemistry	2 Cr.
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This course enables students to build the essential chemical foundation required for subsequent training while fostering the critical and scientific mindset of the future dentist. The course aims to provide the scientific background necessary to understand the physicochemical properties of matter, from the microscopic scale to the macroscopic scale.

003CORGl2	Organic Chemistry	2 Cr.
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This course introduces the fundamental principles of organic chemistry. It covers the nomenclature of major functional groups, the properties of stereoisomers, the identification of organic compounds using spectroscopic methods, and the fundamental concepts of reaction mechanisms and chemical reactivity.

003CHORS1	Oral Surgery	2 Cr.
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This course equips students with essential knowledge and practical skills in oral surgery. Students will learn to manage various surgical procedures, use instruments correctly, and understand pharmacological principles applied to oral surgery. Special attention is given to the prevention and management of potential complications.

003CCOlS1	Oral Surgery Clinic 1	1 Cr.
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This course introduces the principles and practice of asepsis in minor oral surgery and the protocols used to minimize the risk of infection. It covers the anatomical principles and surgical techniques involved in dental extractions, including wisdom tooth extraction, multiple extractions, and alveolectomy, with particular emphasis on the prevention and management of complications. Students will also develop suturing skills and learn appropriate techniques for promoting post-extraction healing. By the end of the course, they will be able to perform dental extractions safely and competently by integrating anatomical knowledge, surgical techniques, and complication management.

003CCO2S2	Oral Surgery Clinic 2	1 Cr.
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This course covers local and regional anesthesia techniques in dentistry, including the selection of the appropriate technique based on the procedure and the patient's clinical condition. Students will learn to assess the patient's medical and dental status before extraction and apply anatomical principles and technical skills to perform dental extractions safely and effectively. The course also addresses postoperative care, with emphasis on promoting healing, minimizing discomfort, preventing complications, and providing appropriate patient instructions. By the end of the course, students will be prepared to perform dental extractions with effective pain management and a strong focus on patient safety and complication prevention.



003CCO1S3	Oral Surgery Clinic 3	2 Cr.
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This course enables students to understand the critical role of asepsis in minor oral surgery and to apply aseptic protocols and techniques to minimize the risk of infections. Students will acquire a deep understanding of the anatomical principles related to dental extractions and develop technical skills for precise extractions. They will master techniques for wisdom tooth extractions, focusing on managing potential complications, and develop specialized skills for multiple extractions and alveolectomies. The course also emphasizes optimizing post-extraction healing and minimizing complications, with additional training in suturing techniques to promote optimal healing.

By the end of this course, students will be equipped to perform dental extractions with competence, combining theoretical knowledge, advanced technical skills, and a thorough understanding of complication management principles.

003CCHOS4	Oral Surgery Clinic 4	1 Cr.
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This course enables students to understand the critical role of asepsis in minor oral surgery and to apply aseptic protocols and techniques to minimize the risk of infections. Students will acquire a deep understanding of the anatomical principles related to dental extractions and develop technical skills for precise extractions. They will master techniques for wisdom tooth extractions, focusing on managing potential complications, and develop specialized skills for multiple extractions and alveolectomies. The course also emphasizes optimizing post-extraction healing and minimizing complications, with additional training in suturing techniques to promote optimal healing.

By the end of this course, students will be equipped to perform dental extractions with competence, combining theoretical knowledge, advanced technical skills, and a thorough understanding of complication management principles.

003CDP1S3	Pediatric Dentistry Clinic 1	2 Cr.
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This course applies a preventive, curative, and educational approach to pediatric dental care, taking into account the physiological, psychological, and behavioral characteristics of children. Students will learn to establish a trusting relationship with children and their parents, manage patient behavior in the dental setting, and provide safe and effective care, including the use of artificial intelligence for diagnostic purposes. During clinical practice, students will take medical and dental histories, perform clinical examinations, establish diagnoses and treatment plans, provide preventive and curative dental care, and ensure therapeutic follow-up and oral health education. Particular emphasis is placed on ergonomics, asepsis, infection control, and the appropriate use of biomaterials and techniques specific to pediatric dentistry. The course also develops professional and interpersonal skills, including communication with children, parents, and the healthcare team, as well as the management of specific clinical situations and emergencies.

003CDP2S4	Pediatric Dentistry Clinic 2	2 Cr.
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This course applies a preventive, curative, and educational approach to pediatric dental care, taking into account the physiological, psychological, and behavioral characteristics of children. Students will learn to establish a trusting relationship with children and their parents, manage patient behavior in the dental setting, and provide safe and effective care. During clinical practice, students will take medical and dental histories, perform clinical examinations, establish diagnoses and treatment plans, provide preventive and curative dental care, and ensure therapeutic follow-up and oral health education. Particular emphasis is placed on ergonomics, asepsis, infection control, and the appropriate use of biomaterials and techniques specific to pediatric dentistry. The course also develops professional and interpersonal skills, particularly communication with children, parents, and the healthcare team, as well as the management of specific clinical situations and emergencies. By the end of the course, students will be able to develop and implement pediatric dental treatment plans, manage pediatric patients, provide appropriate dental care, and perform clinical procedures in accordance with ergonomic and aseptic principles.

003CLD1S1	Restorative Dentistry Clinic 1 (Multidisciplinary Mode)	2 Cr.
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This course consists of a clinical internship focused on patient care. Students will learn to diagnose and treat patients presenting with simple carious and non-carious lesions, select the appropriate restorative material for



each clinical case, and use digital technologies and appropriate artificial intelligence tools to support diagnosis and treatment.

003CLD2S2	Restorative Dentistry Clinic 2 (Multidisciplinary Mode)	2 Cr.
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This course consists of a clinical internship focused on patient care. Students will learn to diagnose and treat patients presenting with simple carious and non-carious lesions, select the appropriate restorative material for each clinical case, and use digital technologies and appropriate artificial intelligence tools to support diagnosis and treatment.

003CDR1S3	Restorative Dentistry Clinic 3 (Multidisciplinary Mode)	2 Cr.
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This course consists of a clinical internship focused on patient care. Students will learn to diagnose and treat patients presenting with simple carious and non-carious lesions, select the appropriate restorative material for each clinical case, and use digital technologies and appropriate artificial intelligence tools to support diagnosis and treatment.

003CDR2S4	Restorative Dentistry Clinic 4 (Multidisciplinary Mode)	2 Cr.
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This course consists of a clinical internship focused on patient care. Students will learn to diagnose and treat patients presenting with simple carious and non-carious lesions, select the appropriate restorative material for each clinical case, and use digital technologies and appropriate artificial intelligence tools to support diagnosis and treatment.

003CDIAS3	Digital Dentistry and Artificial Intelligence Clinic 1	1 Cr.
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This course introduces the acquisition, analysis, and clinical use of digital data in dentistry. Students will learn to use intraoral and facial scanners and digital imaging technologies, follow standardized acquisition protocols, assess data quality, and identify errors that may affect scan accuracy. The course also explores the integration of artificial intelligence into dental imaging and digital workflows to support diagnosis, treatment planning, and clinical precision. Students will apply these technologies throughout the digital workflow, from data acquisition and analysis to diagnosis, treatment planning, and clinical communication.

003CDIAS4	Digital Dentistry and Artificial Intelligence Clinic 2	1 Cr.
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This course develops students' competencies in the acquisition, analysis, and clinical use of digital data in dentistry. It focuses on digital technologies, particularly intraoral and facial scanners and digital imaging, with emphasis on standardized acquisition protocols, data quality assessment, and the identification of errors that may affect scan accuracy. The course also introduces the fundamental principles of artificial intelligence applied to dental imaging and digital workflows, including its role in supporting diagnosis, treatment planning, and clinical accuracy. Students will learn to integrate digital technologies throughout the clinical workflow, from data acquisition and analysis to diagnosis, treatment planning, and clinical communication.

003CEN1S1	Endodontics Clinic 1 (Multidisciplinary Mode)	3 Cr.
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This course develops the scientific knowledge and clinical skills required to perform endodontic treatment on single-rooted and multirooted teeth. Students will apply endodontic principles and techniques to the clinical management and treatment of different root canal systems.

003END2I6	Endodontics Clinic 2 (Multidisciplinary Mode)	1 Cr.
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This course introduces the different stages of endodontic treatment, with particular emphasis on root canal shaping and obturation in simple and complex single- and double-rooted teeth. The theoretical content is complemented by practical training in the shaping and obturation of single- and double-rooted teeth (003TPE2I6), enabling students to apply endodontic principles and techniques in a practical setting.

003CEN1S3	Endodontics Clinic 3 (Multidisciplinary Mode)	3 Cr.
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This course equips students with the clinical skills and scientific knowledge necessary to perform root canal





treatment and retreatment on single-rooted and multi-rooted teeth.

003CEN2S4	Endodontics Clinic 4 (Multidisciplinary Mode)	3 Cr.
This course develops the scientific knowledge and clinical skills required for endodontic diagnosis and treatment. Students will learn to diagnose pulpal and periradicular pathologies, establish appropriate treatment plans, perform endodontic treatment on single-rooted and multirooted teeth, and carry out endodontic retreatment on single-rooted teeth. The course emphasizes a systematic, evidence-based approach to clinical decision-making and the management of endodontic cases.		
003CMO1S3	Oral Medicine Clinic 1 (Multidisciplinary Mode)	1 Cr.
This course examines complex clinical cases, enabling students to deepen their knowledge and apply the diagnostic skills acquired throughout their previous years of study.		
003CMO2S4	Oral Medicine Clinic 2 (Multidisciplinary Mode)	2 Cr.
This course examines complex clinical cases, enabling students to deepen their knowledge and apply the diagnostic skills acquired throughout their previous years of study.		
003CMORS1	Oral Medicine and Radiology Clinic 1 (Multidisciplinary Mode)	1 Cr.
This course develops the essential competencies required for dental practice, with emphasis on patient communication, medical history-taking, comprehensive extraoral and intraoral clinical examination, and treatment planning. Students will learn to collect relevant medical information, determine and justify the need for radiographic examinations, interpret radiographic findings, and develop treatment plans tailored to each patient. In radiology, the course focuses on the application of radiation protection principles, the development of technical skills in radiographic imaging, and the visualization and interpretation of radiographs.		
003CMORS2	Oral Medicine and Radiology Clinic 2 (Multidisciplinary Mode)	1 Cr.
This course develops the essential competencies required for dental practice, with emphasis on patient communication, medical history-taking, comprehensive extraoral and intraoral clinical examination, and treatment planning. Students will learn to collect relevant medical information, determine and justify the need for radiographic examinations, interpret radiographic findings, and develop treatment plans tailored to each patient. In radiology, the course focuses on the application of radiation protection principles, the development of technical skills in radiographic imaging, and the visualization and interpretation of radiographs.		
003CLDGI6	Oral Medicine and Radiology Clinic	1 Cr.
This course provides a practical introduction to dental consultation and oral radiology. Students will learn to establish a trusting relationship with patients, obtain a comprehensive medical history, clearly explain dental procedures, and apply appropriate hygiene and aseptic protocols. The course also introduces the fundamental principles of oral radiology and familiarizes students with software used for radiographic image acquisition and visualization.		
003MTCIS4	Multi Clinic: Tutoring + Infection Control	1 Cr.
This course provides academic and clinical supervision for fourth- and fifth-year students during their clinical activities. Under the guidance of a supervising instructor, students will manage and follow up on clinical cases within multidisciplinary clinical sessions and complete the required number of cases during the academic year. Particular emphasis is placed on comprehensive, structured, and continuous patient care, in accordance with established treatment timelines and clinical protocols. The course also develops professional competencies in treatment planning, patient follow-up, interdisciplinary teamwork, and professional responsibility in dental practice.		
003CLO1S3	Orthodontics Clinic 1	1 Cr.

This course provides students with their first clinical experience in orthodontics through 40 hours of supervised



clinical training. Students will participate in orthodontic consultations alongside residents and conduct pre-consultations in pairs, performing preliminary clinical examinations and developing their dentist-patient communication skills. These initial patient encounters will enable them to conduct a complete orthodontic clinical examination, establish a preliminary diagnosis, and guide patients who consent to orthodontic treatment toward a comprehensive consultation. Clinical sessions also include case presentations in which students will present a complete clinical assessment, including clinical, radiographic, and dental findings and diagnoses, and apply the theoretical knowledge acquired throughout their training. Each student is required to complete the prescribed number of pre-consultations, case presentations, and supervised clinical activities.

003CLO2S4	Orthodontics Clinic 2	1 Cr.
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This course provides students with their first clinical experience in orthodontics through 40 hours of supervised training. Students will participate in orthodontic consultations alongside postgraduate residents and conduct pre-consultations in pairs, performing preliminary clinical examinations on several patients. These initial patient encounters will develop their ability to perform a complete orthodontic clinical examination, establish a preliminary diagnosis, communicate effectively with patients, and refer patients who consent to orthodontic treatment for a comprehensive consultation. Clinical sessions also include case presentations in which groups of three to four students will use PowerPoint to present a complete clinical assessment, including clinical, radiographic, and dental findings and diagnoses. Throughout the course, students will apply the theoretical knowledge acquired during their training and complete the required number of pre-consultations, case presentations, and supervised clinical activities.

003CLP1S1	Periodontology Clinic 1 (Multidisciplinary Mode)	2 Cr.
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This course covers non-surgical treatment of periodontal disease.

003CLP2S2	Periodontology Clinic 2 (Multidisciplinary Mode)	2 Cr.
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This course provides an in-depth understanding of the clinical and radiographic assessment of patients, with particular emphasis on treatment planning and the periodontal and occlusal factors that influence long-term treatment outcomes. Students will learn various scaling and periodontal care techniques used to maintain periodontal health and will examine periodontal healing from clinical and histological perspectives to understand the underlying biological processes and tissue response. The course integrates clinical and radiographic assessment with periodontal treatment planning, enabling students to develop the knowledge and skills required for comprehensive patient care.

003CLP1S3	Periodontology Clinic 3 (Multidisciplinary Mode)	2 Cr.
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This course covers non-surgical treatment of moderate and advanced periodontal disease in a multidisciplinary context.

003CLP2S4	Periodontology Clinic 4 (Multidisciplinary Mode)	2 Cr.
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This course covers non-surgical treatment of moderate and advanced periodontal disease in a multidisciplinary context.

003CPA1S3	Removable Prosthesis Clinic 1	2 Cr.
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This course consists of a clinical internship in removable prosthodontics. It applies the knowledge and concepts acquired in the relevant theoretical courses to clinical patient care. Students will learn to manage patients at the Dental Care Center using interim removable partial dentures, removable partial dentures with metal frameworks, and complete dentures.

003CPA2S4	Removable Prosthesis Clinic 2	2 Cr.
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This course consists of a clinical internship in removable prosthodontics. It applies the knowledge and concepts acquired in the relevant theoretical courses to clinical patient care. Students will learn to manage patients at the Dental Care Center using interim removable partial dentures, removable partial dentures with metal frameworks,

and complete dentures.

003CPC1S1	Fixed Prosthesis Clinic	13 Cr.
This required clinical internship applies the principles and techniques acquired in the theoretical course on single-unit fixed prosthodontics. Students will learn to provide a definitive full-coverage crown for a prepared natural tooth in a clinical setting.		
003CPC2S2	Fixed Prosthesis Clinic 2	3 Cr.
This clinical internship provides practical training in single-unit fixed prosthodontics, building on the corresponding theoretical course. By the end of the internship, students will be able to fabricate a definitive full-coverage crown on a prepared natural tooth in a clinical setting.		
003CPC1S3	Fixed Prosthesis Clinic 3 + Occlusion (Multidisciplinary Mode)	3 Cr.
This clinical internship provides advanced clinical training in fixed prosthodontics, building on the theoretical course and fourth-year clinical internship. By the end of the internship, students will be able to fabricate single crowns and definitive full-coverage fixed dental prostheses supported by prepared natural teeth or implants.		
003CPC2S4	Fixed Prosthesis Clinic 4	3 Cr.
This clinical internship provides advanced clinical training in fixed prosthodontics, building on the theoretical course and fourth-year clinical internship. By the end of the internship, students will be able to fabricate single crowns and definitive full-coverage fixed dental prostheses supported by prepared natural teeth or implants.		
003CLRAS3	Radiology Clinic 1	1 Cr.
This course enhances students' skills in performing oral and extra-oral radiographs, interpreting radiographic images, and composing accurate radiological reports.		
003CLRAS4	Radiology Clinic 2	1 Cr.
This course enhances students' skills in performing oral and extra-oral radiographs, interpreting radiographic images, and composing accurate radiological reports.		
003CIEFS2	Accounting and Introduction to Financial Statements	1 Cr.
This course explains accounting principles and their significance in clinic management. Students will learn to effectively utilize accounting tools to enhance their professional practices.		
003COIEI3	Infection Control and Ergonomics	1 Cr.
This course aims to: • Explain the importance of infection prevention and control in dental practice. • Introduce standard infection control procedures. • Familiarize students with the dental unit and clinical workspace.		
003DEPCI4	Community Dentistry	1 Cr.
This course explains the principles of caries disease in children and adolescents and explores prevention methods. It introduces students to epidemiological studies and familiarizes them with the global shift towards holistic dentistry.		
003DEDI3	Digital Dentistry	1 Cr.
This course covers the basics of digital dentistry and new technologies, as well as digital radiology and its clinical and academic applications.		

003DDIA15	Digital Dentistry and Artificial Intelligence	1 Cr.
This course covers the digital dentistry workflow, starting with image acquisition and processing techniques, as well as computer-aided design and manufacturing.		
003DENR13	Restorative Dentistry	1 Cr.
This course is complemented by practical work (003TPDR13). It describes the basic principles and materials used in direct restorations in restorative dentistry.		
003DER214	Restorative and Aesthetic Dentistry 1	1 Cr.
This course is complemented by practical work (003TPR115). It enables students to recognize the different techniques and materials suitable for indirect restorations, whitening, and non-invasive techniques.		
003DER115	Restorative and Aesthetic Dentistry 2	1 Cr.
This course is complemented by practical work (003TPR115). It enables students to recognize the different techniques and materials suitable for indirect restorations, whitening, and non-invasive techniques.		
003DEH113	Dental Development and Histology 1	2 Cr.
This course covers the histology and embryology of the tooth.		
003DEH114	Dental Development and Histology 2	1 Cr.
This course covers the histology and embryology of the tooth. By the end of this course, students will be able to recognize histological structures and explain the normal development of an organ, diagnose anomalies, and identify innate or acquired pathologies along with their treatments.		
070EDTNM1	Digital Text Editing	2 Cr.
This course trains students to master the computer programs necessary to meet the presentation requirements of a thesis as defined by the Faculty of Science.		
003PRORS2	Research Protocol Development	1 Cr.
This course equips students with the skills necessary to design, write and present a research protocol effectively, using advanced scientific writing techniques and integrating principles of clinical problem solving.		
003ENDO15	Endodontics 1	2 Cr.
This course is complemented by a practical workshop on shaping and filling single-rooted and bi-rooted teeth (003TPE115). It enables students to understand the steps of root canal treatment, including the filling of simple and complex single-rooted and bi-rooted teeth.		
003END216	Endodontics 2	1 Cr.
This course is complemented by a practical workshop on shaping and filling single-rooted and bi-rooted teeth (003TPE216). It enables students to understand the steps of root canal treatment, including filling of simple and complex single-rooted and bi-rooted teeth.		
003ENDOS1	Endodontics 3	2 Cr.
This course introduces the fundamental principles of endodontic treatment. It covers the different stages of		

endodontic therapy, with particular emphasis on root canal shaping and obturation in simple and complex cases, conventional endodontic treatment, and the various stages of endodontic retreatment, particularly in molars. The course also addresses the management of endodontic emergencies and treatment-related complications. It is complemented by a practical session (TP) on root canal shaping and obturation in single- and double-rooted teeth.

003ENLI1	Lebanese Issues (in Arabic)	2 Cr.
This course analyzes the historical, economic, social, and geographical evolution of Lebanon, highlighting its challenges and successes from 1860 to the present. It examines various aspects such as agriculture, industry, services, emigration, tourism, transportation, foreign relations, presidential mandates, urban and rural characteristics, legislative elections, and financial collapse, to understand the complex dynamics shaping the country and its development.		
003EVB11	Environment and Biodiversity	1 Cr.
This course introduces major contemporary environmental issues and biodiversity. It examines the links between the environment, natural resource management, and biodiversity conservation, while exploring the principles of sustainable development and permaculture. Students will develop an understanding of current environmental challenges and their impacts on society and human health.		
003EPST12	Epidemiology and Applied Biostatistics in Dentistry	1 Cr.
This course familiarizes future graduates with the methods and concepts of descriptive statistics, the principles of statistical inference, sampling methods, and the interpretation of statistical results in their dental practice and scientific studies, enabling them to effectively utilize this knowledge in seminars and oral presentations.		
003ETHDS3	Ethics and Dentistry	2 Cr.
This course familiarizes students with the notions of morals, ethics and deontology, as well as ethical principles applicable to the dental profession. Students will analyze diverse ethical problems that may arise in dental practice, identify the ethical principles involved, and find adequate solutions applicable in professional practice while considering these principles.		
018ETHIL1	Fundamental Ethics	2 Cr.
This course explores the challenges of navigating a world where references and values are scattered, and norms have become relative, often reflecting individual convictions. It addresses persistent questions in everyone's conscience, such as: What can I do to make an act truly humanizing for myself and for others? How can I lead a good and happy life while also being responsible?		
003EXCO11	Expression and Communication 1	2 Cr.
This course employs a set of methodological tools to effectively design and communicate information. It focuses on equipping students with the skills to articulate and structure their written and oral presentations coherently, thereby enhancing their communication abilities. Mastering these competencies is vital for achieving success in both academic and professional environments. By the end of this course, students will have cultivated advanced linguistic and methodological skills essential for effective communication.		
003EXC212	Expression and Communication 2	2 Cr.
This course employs a set of methodological tools to effectively design and communicate information. It focuses on equipping students with the skills to articulate and structure their written and oral presentations coherently, thereby enhancing their communication abilities. Mastering these competencies is vital for achieving success in both academic and professional environments. By the end of this course, students will have cultivated advanced linguistic and methodological skills essential for effective communication.		
003GENE13	Genetics	1 Cr.

This course covers the basic genetic concepts related to medical genetics (chromosomal abnormalities,



transmission of hereditary diseases, diagnostic techniques, functional genetics, etc.). It emphasizes the application of clinical knowledge to specific dental pathologies while also tracking advancements in scientific understanding and professional clinical practices related to certain hereditary conditions, such as dental agenesis and oligodontia. Additionally, students will expand their theoretical knowledge of the genetic tests utilized in these contexts.

003GCDMI2	Conflict Management in the Medical-Dental Field	2 Cr.
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This course empowers students to prevent and effectively manage conflict situations within the health and dental environments. It fosters the competency of “Acting humanely with individuals, families, and communities in their health experiences.” Students will explore concepts and methodologies of conflict management and mediation, enhancing their skills in conflict resolution, active listening, and positive communication while cultivating trust-based relationships. The course adopts an interactive format, incorporating group exercises and role-playing scenarios.

003GDESI6	Management of Health Facilities & Economy	2 Cr.
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This course examines medical institutions as matrix organizations that require competent and efficient human resources to provide patient care services at all levels. Effective hospital management and administration involve the organization, coordination, planning, staffing, evaluation and control of healthcare services provided by hospitals. The primary goal of healthcare organizations is to provide quality patient care cost-effectively while ensuring the safety of healthcare workers in the workplace. By the end of this course, students will be able to describe the management requirements of health institutions, cite certain specificities of health organizations, apply management tools and present to health system stakeholders healthcare issues and economic responses to them.

003GSTRI3	Stress and Communication Management in the Dental Office	1 Cr.
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This course enables students to communicate effectively with all stakeholders regarding the needs of the dental profession, and to recognize methods for managing communication and stress in dental practice.

It introduces the key concepts of interpersonal communication and stress management to build a positive and professional image of the practitioner in order to:

- Build professional credibility
- Strengthen the patient-practitioner relationship
- Improve the practitioner’s clinical and relational performance by reducing day-to-day stress levels.

003MRCPS2	Practical and Operational Management of the Dental Office	1 Cr.
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By the end of this course, students will be able to professionally welcome patients, apply the recommendations from the Calgary-Cambridge medical communication guide as adapted to dental office practice, and appropriately utilize communication tools for dentists. Students will also demonstrate the application of communication in dental office management by establishing internal regulations. They will be able to define human resource needs and rules for working together in a dental office, as well as methods for preventing and managing interpersonal conflicts.

003HÉMI4	Hematology and Immunology	2 Cr.
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This course is designed for second-year dental students. It offers an integrated introduction to the major biological systems of regulation and defense in the human body. The hematology section focuses primarily on hemostasis, detailing the mechanisms of coagulation and the factors involved. The immunology section explores the foundations of innate and adaptive immunity, as well as the main cellular and molecular components. The different types of hypersensitivity are also thoroughly covered. Finally, the oncology section presents the fundamental mechanisms of cellular transformation, tumor growth, and the general principles of carcinogenesis.

003HISTI2	Histology	2 Cr.
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This course explores human tissues in terms of histogenesis, composition, structure, biological characteristics, location, types, and functions. It also covers tissue renewal, cellular communication, and the most common tissue pathologies.



003IMPCS1	Surgical Implantology	1 Cr.
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This course introduces the biological and clinical principles of implant surgery. It covers the fundamental concepts of implantology, implant systems and components, surgical techniques, implant selection, and treatment planning, with emphasis on the biological processes involved in healing and successful implant therapy. Students will also learn to manage implant cases, identify the causes of implant failure, and address related complications in accordance with current principles and practices in implant dentistry.

003INFO12	Applied Informatics in Dentistry	2 Cr.
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This course develops the skills required to create, organize, analyze, and present information effectively using Microsoft Word, Excel, and PowerPoint. Through practical exercises and projects, students will produce documents, spreadsheets, and presentations that meet academic and professional standards.

Word: Students will learn to:

- Create, structure, and format complex documents, including research papers, reports, and theses.
- Use styles, tables of contents, headers and footers, and citations.
- Insert and manage tables, images, captions, and appendices.
- Apply academic formatting standards.

Excel: Students will learn to:

- Create and organize data tables.
- Use essential formulas and functions, including statistical, logical, and text functions.
- Create charts to visualize data.
- Perform basic data analysis using sorting, filtering, and PivotTables.

PowerPoint: Students will learn to:

- Design clear and professional presentations.
- Structure content and present ideas using diagrams, images, and charts.
- Use transitions, animations, and presentation tools effectively.
- Prepare and deliver oral presentations supported by slides.

003INRE14	Introduction to Research in Dentistry	1 Cr.
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This course introduces students to scientific research in dentistry and develops the skills required to analyze, evaluate, and conduct research. It covers the structure of a scientific article and the role of each section in communicating research findings. Students will learn the principles of scientific writing, including how to formulate clear, testable research hypotheses and write coherent introductions, methodologies, results, and discussions. The course also introduces the main statistical concepts used in dental research and develops students' ability to interpret statistical results presented in scientific articles. It examines levels of evidence and the different scales used to assess the quality of scientific evidence in dentistry, as well as the concept of journal impact factor and its role in evaluating scientific journals.

Students will develop critical appraisal skills to assess the methodology, results, and conclusions of scientific articles and learn to use structured appraisal tools to guide this process. The course also covers the principles of evidence-based dentistry and their importance in clinical decision-making, enabling students to assess the relevance and validity of clinical and research evidence and apply it appropriately in dental practice.

003INNOS1	Innovation + Hands-on 1	1 Cr.
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This course equips students with a creative mindset and practices essential for fostering innovation. Beginning with the mindset shift needed to inspire creativity, students will explore sources of innovative ideas and strategies for building creative confidence in themselves and others. This course introduces design thinking as a structured approach to innovation, covering stages from need-finding and empathy to insight generation, prototyping, and experimentation. Finally, students will learn how to cultivate and implement an innovative mindset within a work environment to inspire and influence others. By the end of this course, students will apply design thinking to a personal project.

003INNOS2	Innovation + Hands-on 2	1 Cr.
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This course stimulates creativity and innovative thinking in dental medicine while developing research and analytical

skills. Students will cultivate creative approaches, analyze needs and gaps in dental practices and technologies, and identify opportunities for innovation. They will conduct comprehensive research on recent advancements, design dental innovations including prototypes where feasible, and translate ideas into practical solutions. Students will strengthen their communication skills to present ideas and prototypes clearly and persuasively, and will prepare to share their innovations with health professionals, investors, and collaborators.

003IATNI2	Artificial Intelligence and Digital Technologies in the Medical Field	1 Cr.
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This course introduces the fundamental concepts of artificial intelligence and explores its applications in medicine and dental medicine.

003INRAS1	Radiological Interpretation	1 Cr.
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This course provides students with a comprehensive understanding of the fundamental principles of radiographic interpretation in dental medicine. Students will learn to systematically analyze radiographic images and identify dental and maxillofacial pathologies to support accurate diagnosis. The course is complemented by clinical training, allowing students to apply the knowledge and skills acquired in a clinical setting.

003INSMI5	Introduction to Multidisciplinary Clinic	1 Cr.
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This course introduces students to multidisciplinary patient management, taking into account the patient's general health, and fosters collaboration among various dental disciplines as well as with medical or paramedical fields. It also helps students develop a treatment plan, considering the order of priority.

0102227L1	Introduction to Photography	2 Cr.
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This course covers:

- Photographic aesthetics, principles of composition, and practical application through research and in-class discussions.
- History of photography and its evolution up to the present day.
- Different components of the camera, including their functions and uses.
- Basic photographic genres, illustrated through the works of renowned photographers in each genre.
- Photographic aesthetics and principles of composition are explored and practiced through in-class discussions, with work divided between technical exercises and projects.

003INRBI1	Introduction to Bibliographic Research	1 Cr.
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This course develops students' ability to identify high-quality scientific articles, distinguish among different types of scientific publications, and understand the structure and purpose of each section of a scientific article. Students will also learn to read and interpret scientific articles and use the Moodle platform.

003INMDI5	Nanotechnology Investment in Medical-Dental Import and Export	1 Cr.
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This course introduces students to import and export procedures for dental products and raw materials, including the relevant regulatory authorities and official resources in Lebanon. Students will learn to interpret Technical Data Sheets (TDS) and Material Safety Data Sheets (MSDS) and understand the fundamentals of international customs classification codes. The course also examines national and international dental markets to develop students' understanding of investment opportunities and professional activity management. It also addresses collaboration with national and international organizations in organizing conferences and monitoring and controlling dental products and raw materials in the dental sector.

003GEROS3	Multidisciplinary Geriodontology	1 Cr.
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This course enables students to establish adequate masticatory function for elderly patients and ensure its stability through appropriate multidisciplinary treatments suited to a weakened orofacial environment.

435LALML2	Arabic Language and Media	2 Cr.
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This course introduces Modern Standard Arabic (MSA) through an interactive approach combining language

learning, cultural awareness, and the development of critical thinking. In this track media serve as a gateway to the Arabic language and to a deeper understanding of the contemporary Arabic world. Drawing on a variety of authentic materials including newspapers, audiovisual and social media, and digital content students will explore major issues and debates shaping contemporary Arabic societies. The course aims to develop students' skills in comprehension and expression in MSA. It also encourages critical engagement with media discourse and reflection on the role of media in contemporary societies.

003COATI2	Coaching Approach to Career Success	2 Cr.
This course develops the personal, interpersonal, and professional skills required for successful integration into clinical practice and a career in dentistry. Complementing students' scientific and clinical training, it provides opportunities for reflection, personal development, and the application of transferable skills essential to professional practice. The course covers mental fitness, emotional intelligence, the Being–Doing–Living dynamic, stress and fear management, self-confidence, effective communication, and public speaking. Students will develop greater self-awareness, strengthen their professional identity, improve their communication skills, and build resilience in managing the emotional demands of dental practice. The course also reinforces key professional competencies, including stress management, building trusting relationships with patients, communication, teamwork, professionalism, and lifelong learning, supporting students in developing a sustainable and well-rounded approach to their future careers.		
003LSPDS4	Legislation on Dental Practice in Lebanon (in Arabic)	1 Cr.
This course covers the practices of third-party payers in Lebanon and the application of social security to dental clinic employees.		
003FDAFS3	Fundamentals of Financial Analysis	1 Cr.
This course allows students to evaluate the financial structure of their clinic. The analysis includes drafting a financial report that describes the present situation of the clinic, and outlines the main financial directives for its future.		
003MDEPI3	Back Pain: Etiology and Prevention	1 Cr.
This course examines the main causes of spinal pain and associated occupational risk factors in dental practice. Students will learn to assess workplace ergonomics and apply appropriate measures to improve operator comfort and efficiency.		
064VALEL1	USJ Values in Daily Life	2 Cr.
This course introduces students to the core values of Saint Joseph University of Beirut (USJ), enabling them to integrate these values into their personal, interpersonal, and professional lives. It encourages students to critically reflect on how the values outlined in the USJ Charter can influence their behaviors, actions, and decisions in addressing the challenges of the contemporary world. It also raises awareness of global issues and ethical responsibilities, preparing students to contribute positively to society.		
003MATDI3	Dental Materials 1	1 Cr.
By the end of this course, students will have up-to-date information on the materials used in dentistry. They will be able to describe the composition and properties of dental materials, and will be able to select and use dental biomaterials. This course is taught in the 1 st semester of the second year, and includes practical sessions, laboratory visits with practical work, video presentations, materials handling, lectures, research notes, and article analysis.		
003MATDI4	Dental Materials 2	1 Cr.
The course offers essential insights into the materials used in dentistry, detailing the structure and chemistry that influence their behavior and performance.		

003MATDI5	Dental Materials 3	1 Cr.
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This course is taught in the 1st semester of the third year, and includes practical sessions, video presentations, materials handling, lectures, and article analysis.

003MATSI1	Mathematics	2 Cr.
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This course introduces the mathematical foundations and tools used to model, analyze, and interpret biological and medical phenomena. It focuses on mathematical modeling in medicine, with particular emphasis on quantitative data interpretation and the use of mathematical models to understand biological and clinical processes. The course also develops the analytical and scientific skills required for data-driven medical and dental practice.

003MLEGS4	Forensic Medicine	1 Cr.
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This course aims to provide students with a deep understanding of the legal and ethical aspects of medical practice, focusing on risk prevention and the management of patient relationships.

This course covers various essential topics, including:

- The roles and responsibilities of forensic doctors
- Techniques for identifying deceased individuals
- Oral and facial lesions in criminal investigations
- Main classes of risks associated with medical treatments, including infections and diagnostic or treatment errors
- Fees and relational issues between patients and practitioners
- Therapeutic complications and associated responsibilities
- Informed patient consent and necessary approvals
- Violations of professional secrecy and associated sanctions
- Professional misconduct and medical liability

003MESOS4	Thesis and Defense	3 Cr.
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This course guides students through the design, conduct, writing, and defense of an original scientific research project. The project may involve a clinical study with patients, an in vitro laboratory study, or data analysis. Students will develop a rigorous research methodology, collect and analyze data using appropriate statistical methods, interpret their findings, and present and defend their work orally.

003MERSI6	Scientific Writing Methodology	1 Cr.
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This course introduces students to the fundamentals and conventions of scientific and academic writing. It covers the structure and characteristics of scientific articles, the use of data and statistics in research, and methods for synthesizing scientific information. Students will develop the skills required to conduct rigorous research, design a research protocol, and communicate a research project clearly and professionally through both written work and oral presentation.

003MICGI3	General Microbiology	2 Cr.
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This course introduces the microbial world and contributes to the development of the following skills:

- Recognizing the different mechanisms of bacterial, viral, parasitic, and fungal infections.
- Identifying cross-infections relevant to dentists and those most frequently encountered globally.

003MICRI6	Specific Microbiology and Oral Microbiology + Hands-on	3 Cr.
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This course examines the main microorganisms pathogenic to humans, including bacteria, viruses, and fungi, and the infectious diseases associated with them. It covers the identification, diagnosis, and management of major infectious agents, with particular emphasis on oral infections and microorganisms that may be transmitted during dental care. Practical sessions complement the theoretical content and reinforce students' understanding of microorganisms relevant to dental practice.

003NDSVI2	Notions of Etiquette	1 Cr.
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This course contributes to the personal development of each student. It covers basic notions of manners associated with body language to enhance interpersonal relationships. It defines what is permitted or prohibited and outlines the obligations individuals have toward one another. By the end of this course, students will be able to read and interpret others' body language and respond appropriately to their environment.

003NUFOI1	Nutrition and Oral Health	2 Cr.
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This course is designed for dental students who have a solid background in cell biology and physiology. It aims to provide a comprehensive understanding of nutrition and its vital role in maintaining oral health and preventing disease.

003OBCL11	Clinical Observation 1	1 Cr.
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This clinical training enables students to become familiar with the dental work environment, including the products, instruments, and techniques used. They will also learn how to conduct bibliographic research on topics of interest.

003OBCL12	Clinical Observation 2	2 Cr.
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This course introduces first-year students to the dental clinical environment, including the instruments, equipment, and materials used in dental practice and their role in patient care. It covers the importance of the patient record in clinical management and introduces the role of clinical and radiographic examinations in establishing a diagnosis. Students will also learn to identify the main radiographic features of dental caries and existing dental treatments.

003OCL13	Clinical Observation 3	2 Cr.
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This course develops the skills required to collect and organize patient medical information, identify the chief complaint, document the history of the present illness and current medications, and compile a complete patient record. Students will learn to perform extraoral and intraoral examinations and distinguish healthy from diseased periodontal, pulpal, and periapical tissues. The course also covers the detection and assessment of dental caries, tooth wear, and other abnormalities, as well as the fundamentals of dental imaging.

003OCL14	Clinical Observation 4	2 Cr.
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This course enables students to welcome patients, describe patient examination procedures, cite dental nomenclature and associated equipment, and recognize the basics of ethics and professionalism.

003OCCL16	Occlusodontics 1	1 Cr.
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This required course is taught in the 3rd year, complemented by practical work (003TPC216). It enables students to recognize the different components of the masticatory system and understand their functions, simulate mandibular movements on the articulator, and interpret the creation and indication of different types of interocclusal plates to address masticatory system dysfunctions.

003OCCL2	Occlusodontics 2	1 Cr.
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By the end of this course, students will be able to analyze occlusion, use imaging for diagnostic purposes, and perform constructive non-invasive medical or occlusal treatments.

003ODOPS1	Pediatric Odontology 1	1 Cr.
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This course is complemented by practical sessions in Semester 1 (S1). By the end of the course, students will be able to develop a pediatric dental treatment plan and understand the principles and techniques of pediatric dental care. They will also become familiar with artificial intelligence tools relevant to pediatric dentistry and their clinical applications.

003ODOPS2	Pediatric Odontology 2	1 Cr.
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This course develops the skills required to manage pediatric patients and provide appropriate pediatric dental

care. Students will also learn to use available artificial intelligence–based search tools relevant to dental practice.

003ORPLS3	Professional Organization (in Arabic)	1 Cr.
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This course introduces students to their professional rights and obligations toward the Lebanese Dental Association, the Lebanese state, and patients.

003PAROI5	Periodontology 1	2 Cr.
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This course develops the skills required to diagnose and establish appropriate treatment plans for patients with simple periodontal diseases.

003PAROS1	Periodontology 2	2 Cr.
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This course develops the skills required to diagnose and establish appropriate treatment plans for patients with simple and advanced periodontal diseases.

003PATDI4	Dental Pathology 1	2 Cr.
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This course enables students to assimilate neurophysiological principles in the maxillofacial sphere and the principles of general pharmacology.

003PATDI5	Dental Pathology 2	2 Cr.
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This course deepens students' knowledge of oral pathology, with particular emphasis on pulpal and periapical conditions, odontogenic infections, cysts, osteitis of the jaws, and the differential diagnosis of radiographic findings. It also addresses the management of at-risk patients and patients taking multiple medications, with emphasis on appropriate prescribing and the management of drug interactions. Upon successful completion of the course, students will undertake clinical internships to apply the knowledge acquired in a clinical setting.

003PCMFS3	Maxillofacial Pathology and Surgery	1 Cr.
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This course aims to familiarize students with the main pathological and reconstructive conditions affecting the oro-maxillofacial region. It particularly addresses sinusitis of dental origin, cleft lip and palate, cancers of the oral cavity, tumors of the jaws, as well as the principles of maxillary reconstruction.

This course enables students to develop an integrated understanding of the etiopathogenic mechanisms, clinical manifestations, diagnostic methods, prognosis, and therapeutic principles related to these conditions. It also contributes to the training of the future dentist in the early identification of oro-facial pathologies, appropriate patient referral, participation in multidisciplinary management, and postoperative or post-therapeutic follow-up.

003PATOS1	Oral and Surgical Pathology	2 Cr.
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This course prepares students for clinical placements, where they will apply the knowledge acquired and develop the ability to formulate appropriate diagnostic and therapeutic hypotheses for the clinical situations encountered.

003PHARS1	Pharmacology	2 Cr.
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This course introduces the science of pharmacology, focusing on understanding the therapeutic actions and side effects of medications. Students will learn the general principles of pharmacology and the main classes of medications, providing them with the foundation for the proper use of drugs in dental practice.

By the end of the first part of the course, students will be able to:

- Understand the two main bases of pharmacology:
 - o Pharmacokinetics: The action of the body on the drug
 - o Pharmacodynamics: The action of the drug on the body
- Identify the four components of pharmacokinetics: Absorption, Distribution, Metabolism, and Elimination
- Apply the principles of pharmacodynamics

By the end of the second part of the course, students will be able to:

- Know the pharmacological properties of certain classes of medications
- Recognize the safety principles of medical prescribing practice.

003PHY01	Physiology 1	2 Cr.
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This course is offered from the first semester of the first year through interactive lectures and tutorials. It plays an important role in the spiral curriculum by providing the foundation for integrating the major functions of the human body and for subsequent pharmacology courses. Students will develop an understanding of the fundamental principles that maintain the body's internal balance (homeostasis) and learn to apply these principles through an integrated approach to human physiology.

003PHYS12	Physiology 2	1 Cr.
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This course is offered from the second semester of the first year through interactive lectures and tutorials. It plays an important role in the spiral curriculum by supporting the integration of the major functions of the human body and providing a foundation for pharmacology. Students will develop an understanding of the fundamental principles of homeostasis and learn to apply them through an integrated approach to human physiology.

003PHYS13	Special Physiology	3 Cr.
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This course plays an important role in the spiral curriculum, particularly as a foundation for semiology and clinical pharmacology. It develops students' understanding of the major functions of the human body, organized by organ systems, and their integration in maintaining overall homeostasis.

003PHYS11	Physics	2 Cr.
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This course enables dental students to master the principles of biomechanics, geometrical optics, bioelectricity, and fluid mechanics, and to understand the related phenomena. By the end of this course, students will link physical laws to their medical applications, particularly in dental medicine.

003PORTS2	Portfolio	2 Cr.
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This course enables students to apply theoretical knowledge in dental practice, develop appropriate strategies for addressing clinical challenges, and adopt a continuous learning approach to enhance their professional skills.

003PRESS3	Case Presentation	2 Cr.
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This course consists of audiovisual presentations of one or more clinical cases treated by students during their clinical training. Students will establish the diagnosis, justify their treatment planning decisions, and critically discuss the advantages and limitations of the treatments performed based on current scientific evidence.

003PCIPS4	Interprofessional Clinical Case Presentation	1 Cr.
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By the end of this course, students will be able to understand and interpret the relationships between systemic diseases and various dental disciplines.

003POEPS4	Oral, Written, and Portfolio Probation	2 Cr.
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This course provides a comprehensive assessment of the knowledge, clinical skills, and professional competencies acquired throughout the five-year dental program. Students will present and defend clinical cases they have treated, explaining their diagnoses, justifying their treatment plans, and discussing treatment outcomes, followed by questions from the examination committee covering their overall training and specific dental disciplines. They will also complete a multiple-choice examination covering the content of the five-year program and submit a portfolio documenting their clinical and academic competencies, including clinical case reports, supervisor evaluations, and reflections on their professional development.

003PRMES3	Thesis Project	1 Cr.
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This course guides students through the design and conduct of a complete research project under faculty supervision. Students will define the research question and objectives, develop the methodology, write the Materials and Methods section, collect and manage data, perform appropriate statistical analyses, interpret the results, and formulate conclusions. Particular emphasis is placed on scientific rigor, research integrity, and

academic communication.

003PROAI3	Removable Prosthesis	2 Cr.
By the end of this course, students will be able to manage partial edentulism, from clinical examination to emergencies, including rehabilitation with an acrylic partial denture.		
003PRA1I5	Removable Prosthesis 1	1 Cr.
This course enables students to manage complete edentulism from clinical examination to handling emergencies, including rehabilitation with a complete denture.		
003PRA2I6	Removable Prosthesis 2	1 Cr.
By the end of this course, students will be able to plan the management of clinical challenges in complete dentures.		
003PRA1S1	Removable Prosthesis 3	2 Cr.
This course focuses on the design of partial metal removable dentures, including plate tracing, parallel study of plaster models, and pre-prosthetic preparation.		
003PRCFS1	Fixed Prosthesis	1 Cr.
This course develops students' ability to assess prosthetic parameters and their relationships with other dental specialties, establish a prognosis, and identify the causes of fixed dental prosthesis failure. Students will also learn to analyze occlusion, use diagnostic imaging, and provide appropriate noninvasive medical or occlusal treatment.		
003PRFPI5	Fixed Prosthesis Plural	2 Cr.
By the end of this course, students will be able to recognize the basic principles and therapeutic steps in plural fixed prostheses.		
003PRFUI3	Single Fixed Prosthesis	1 Cr.
By the end of this course, students will be able to recognize the basic principles of preparations and therapeutic steps in single fixed prosthesis.		
003PITPS2	Implant Prosthesis + Hands-on	2 Cr.
This course is complemented by practical sessions in Implant Prosthodontics. Students will apply their knowledge of dental sciences and biomaterials to establish an implant diagnosis and develop a sequential treatment plan. They will also learn to perform the clinical and preclinical procedures involved in single, partial, and full-arch implant-supported prostheses in accordance with current scientific evidence.		
003PSYMI3	Medical Psychology	1 Cr.
This course enables students to: - Learn psychological concepts related to the medical field. - Understand the developmental specifics of each life phase (childhood, adolescence, adulthood, and elderly) and their perceptions and reactions to illness. - Learn how to address patients of various ages and psychological profiles as a dentist. - Recognize the importance of the doctor-patient relationship and effective communication.		
003PUSPI4	Public Speaking	1 Cr.
This course introduces the fundamental principles of oral communication across a range of speaking contexts. It develops students' skills in preparing and delivering effective presentations, with emphasis on content, language and style, vocal delivery, audience analysis, reasoning, and communication strategies. The course also covers the effective use of visual aids to support oral presentations.		

003RADII5	Radiology and Radioprotection	2 Cr.
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This course introduces the properties of X-rays and the principles of radiation physics. Students will learn techniques for radiation protection and will study intraoral and extraoral X-ray methods, including RVG, Scanora, and CT scans used in maxillofacial treatments.

003APPRI4	Problem Solving APP 1	2 Cr.
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This course uses problem-based learning (PBL) through a two-stage group process. In the first session, students will read a problem, identify key terms, highlight important ideas, list issues to clarify, organize hypotheses, and formulate learning objectives before completing individual work. In the second session, students will review and verify the learning objectives and hypotheses, followed by a synthesis and evaluation conducted by the instructor.

003APPRI5	Problem Solving APP 2	1 Cr.
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This course applies problem-based learning (PBL) to help students develop practical skills through real or simulated clinical cases. Students will integrate theoretical knowledge into practical situations and gain experience in patient care. They will also strengthen their communication skills by asking relevant questions, listening attentively, and explaining complex concepts clearly to peers and patients.

Each PBL session has two parts. In the initial session, the clinical case is presented as it would appear in a private dental office. In the return session, students will work in groups to identify the components of the problem, analyze them, and develop scientific and practical solutions.

003ROCLI6	Clinical Rotation	2 Cr.
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This course prepares third-year students for clinical practice by allowing them to assist fourth-year students throughout the second semester. Students will gain hands-on experience, develop their clinical skills, and integrate into the dental care team before performing the procedures they have learned theoretically or in practical training. The objectives of this clinical rotation are:

- Strengthening clinical skills
- Understanding various dental procedures
- Gaining proficiency in using instruments and materials
- Promoting teamwork, collaboration, and mentoring
- Developing case management skills
- Enhancing the quality of care
- Understanding assessment methods

003SBSP16	General and Oral Health of the Young Adult	2 Cr.
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This course enables students to recognize the particularities of oral health care for adolescents and to manage adolescent patients.

It also enables students to define the principles of medical ethics, control stress, master communication techniques, update treatments in line with developments in dentistry, and manage finances. Students will learn to manage preventive and curative dental care adapted to the needs and particularities of the patient, practicing dentistry in accordance with the rules of ethics, jurisprudence and professional deontology.

003SEMEI3	Pathological Semiotics 1	1 Cr.
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This course covers the clinical manifestations of common conditions encountered in outpatient internal medicine and the diagnostic tests required for their evaluation. Students will learn to identify and manage major cardiovascular risk factors and understand current indications for antibiotic prophylaxis for infective endocarditis. The course also addresses the appropriate use of medications commonly prescribed in oral and dental medicine for at-risk patients, with particular emphasis on benefit-risk assessment. Small projects complement the course and develop communication, autonomy, and creativity.

003SÉMPI4	Pathological Semiotics 2	2 Cr.
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By the end of these courses, students will be able to list the indications, contraindications, and side effects of medications, and to describe certain general diseases that may affect the oral cavity.

They will also be able to describe medical syndromes that are commonly encountered in everyday life.

003SENAI2	Awareness of Anxiety	1 Cr.
This course covers the different manifestations of anxiety, its risk factors, and the psychiatric illnesses associated with it. It addresses anxiety as a spectrum, ranging from normal to pathological, and explores various strategies for managing anxiety and the factors that promote well-being.		
003SOIU1	Emergency Care 1 (in Arabic)	1 Cr.
This course introduces students to their medical role in prevention and basic life support BLS techniques as responders. It includes practical training, enabling students to practice BLS techniques on classmates or mannequins in real-time and ensure the proper acquisition of these skills. By the end of this course, students will be able to prevent and manage complications in emergency situations.		
003SOIU6	Emergency Care 2 + Hands-on (in Arabic)	1 Cr.
This required course is taught in the third year to meet international requirements for updating resuscitation skills every 2 years. It includes practical training and covers the pathophysiological aspects of medical emergencies in the dental office, linking science to the practical side of BLS. By the end of this course, students will be able to assess the need for preventive modifications of interventions, recognize patients at risk, and manage medical emergencies that may arise following dental care.		
003SOIUS4	Emergency Care 3 (in Arabic)	1 Cr.
This required course is taught in the fifth year to meet international requirements for updating resuscitation skills every 2 years. It includes practical training and covers the medico-legal aspects of medical emergencies in the dental office, ensuring future dentists are responsible in their professional practice. By the end of this course, students will be able to modify the modalities of their interventions in the dental office to prevent clinical complications in patients at risk and to manage medical emergencies that may arise following dental care.		
003TPADI1	Dental Anatomy Hands-on 1	2 Cr.
This course provides the practical application of the concepts covered in course 003ANADI1. Through drawing and wax carving exercises, students will reproduce the morphology of representative teeth, including central incisors, lateral incisors, and canines. These exercises deepen students' understanding of dental morphology, develop observational and three-dimensional visualization skills, and improve their ability to establish appropriate finger rests for intraoral procedures across dental specialties.		
003TPADI2	Dental Anatomy Hands-on 2	2 Cr.
This course provides the practical application of the concepts covered in course 003ANADI2. Through drawing and wax carving exercises, students will reproduce the morphology of representative teeth, including premolars and molars. These exercises deepen students' understanding of dental morphology, develop observational and three-dimensional visualization skills, and improve their ability to establish appropriate finger rests for intraoral procedures across dental specialties.		
003TPAPI6	Pathological Anatomy Hands-on	1 Cr.
This course introduces the role of anatomic pathology in the diagnostic process, including basic microscopic examination techniques and the fundamental principles of lesion diagnosis. Students will learn to correlate microscopic findings with clinical and laboratory data to establish an accurate and coherent diagnosis.		
003TPBHI2	Biology + Histology Hands-on	1 Cr.
This course provides first-year dental students with practical training in biology and histology, complementing theoretical instruction through experimental and observational activities. Students will learn to use a light microscope, prepare and examine microscopic specimens, and identify major cellular and tissue structures. Biology		

sessions cover animal and plant cells and cellular processes such as plasmolysis, turgor, and mitosis, while histology sessions focus on identifying and differentiating the major tissue types of the human body. Through microscopic observation, students will develop scientific observation and morphological analysis skills, gain proficiency in basic laboratory techniques, and learn to relate microscopic structures to biological functions, providing essential foundations for biomedical sciences and dental medicine. The practical setting also promotes closer interaction with instructors, allowing for greater discussion and individualized guidance in the techniques covered.

003TPCOS2	Community Hands-on	1 Cr.
This course provides practical training in community dentistry, a discipline focused on promoting oral health, preventing oral diseases, and improving population health and quality of life through community-based, educational, and preventive interventions. Students will apply theoretical knowledge acquired in dental public health to real or simulated situations and develop skills in prevention, health education, and the planning and management of community oral health programs. The course also explores the use of artificial intelligence in community dentistry, including early diagnosis, data analysis, community oral health program planning, population education and awareness, and research, while demonstrating how AI can support student training, disease prevention, and public health program management.		
003TPDDS2	Digital Dentistry Hands-on	1 Cr.
This preclinical course introduces undergraduate students to the practical use of digital technologies in dentistry and develops the fundamental technical skills needed to operate dental digital systems in simulated clinical settings. Students will practice intraoral scanning, digital data acquisition, scan evaluation, and digital file management within CAD/CAM workflows, with emphasis on manual dexterity, scanning protocols, identification of common scanning errors, and the quality of digital impressions. Through supervised practical sessions, students will learn to integrate digital tools into contemporary dental workflows, preparing them for their clinical application in restorative and prosthetic dentistry and interdisciplinary treatment.		
003TPR2I6	Restorative Dentistry Hands-on 4	3 Cr.
This required preclinical practical course is offered in the 3 rd year of dentistry, semester 6. It applies the concepts taught in the course 003DER1I5.		
003TPDRI3	Restorative Dentistry Hands-on 1	1 Cr.
This required preclinical practical course is offered in the 2 nd year of dentistry, semester 3. It is the practical application of the course 003DER1I5.		
003TPR1I5	Restorative Dentistry Hands-on 3	2 Cr.
This required preclinical practical course is offered in the 3 rd year of dentistry, semester 5. It applies the concepts taught in the course 003DER1I5.		
003TPDRI4	Restorative Dentistry Hands-on 2	1 Cr.
This required preclinical practical course is offered in the 2 nd year of dentistry, semester 4. It is the practical application of the course 003DER1I5.		
003TPDHI4	Dental Development and Histology Hands-on	1 Cr.
This common required course is offered in the 2 nd year and serves as the practical application of the course 003DEHI4. It interprets histological sections of certain dental tissues.		
003TPE1I5	Endodontics Hands-on 1	2 Cr.
This course focuses on preclinical work.		

003TPE2I6	Endodontics Hands-on 2	2 Cr.
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This course focuses on preclinical work.

003TPE3S2	Endodontics Hands-on 3	1 Cr.
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This fourth-year practical course develops students' preclinical and clinical skills in endodontics, with particular emphasis on molar treatment and endodontic retreatment through exercises on teaching models or extracted teeth. Students will perform complete endodontic treatment of molars, including access cavity preparation, working length determination, root canal shaping, and obturation, and learn to prepare and organize the operator tray safely and ergonomically. The course also covers fundamental endodontic retreatment protocols and procedures in accordance with biological principles and safety standards. Through the management of complex situations and simulated complications, students will develop clinical reasoning and appropriate decision-making skills.

003TPECI5	Ergonomics and Infection Control Hands-on	1 Cr.
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This course aims to:

1. Raise students' awareness of the importance of infection control in dental practice.
2. Familiarize students with various infection control techniques.
3. Familiarize students with the dental chair, the work area, and dental ergonomics.

003TPOCI6	Occlusodontics Hands-on	1 Cr.
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This course provides practical work in occlusodontics, focusing on articulator mounting and the fabrication of muscle relaxation devices such as bite planes and splints. Students will understand occlusal physiology, learn impression techniques, practice articulator mounting, use the Lucia jig, and fabricate bite planes and splints. These sessions familiarize students with the technical skills required to design, fabricate, and adjust muscle relaxation devices while developing their understanding of fundamental occlusal principles.

003TPOPS1	Pediatric Odontology Hands-on	1 Cr.
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This required fourth-year course, offered in the first semester, introduces students to the comprehensive management of pediatric patients and the main therapeutic procedures used in pediatric dentistry. Preclinical training incorporates artificial intelligence-based diagnostic support tools for the analysis of radiographs and clinical images and the early detection of pathologies. Simulation and virtual reality technologies are also used to reproduce a range of pediatric clinical situations, providing a safe environment in which students can develop their clinical skills and decision-making abilities.

003TPPAI6	Periodontology Hands-on	1 Cr.
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This course focuses on periodontal charting and the treatment of simple periodontal disease.

003TPA1I5	Removable Prosthesis Hands-on 1	2 Cr.
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This course complements the third-year theoretical course and provides practical training in the laboratory procedures involved in complete denture fabrication.

003TPA2I6	Removable Prosthesis Hands-on 2	1 Cr.
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This course applies the concepts covered in course 003PRA1I5. Students will perform the laboratory procedures involved in complete denture fabrication.

003TPA1S1	Removable Prosthesis Hands-on 3	1 Cr.
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This course applies the concepts covered in course 003PRA1S1. Students will perform the laboratory procedures involved in fabricating a removable partial denture with a metal framework.

003TPA2S2	Removable Prosthesis Hands-on 4	1 Cr.
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This common course enables students to create a complete denture on a phantom model.

003TPPFI5	Fixed Prosthesis Hands-on 1	2 Cr.
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This required practical course in single-unit fixed prosthodontics, following the theoretical course, is offered in the 3rd year (semester 5).

Students will prepare teeth for a 3-unit bridge and fabricate a provisional bridge from a cold acrylic block on a simulated model for prosthetic rehabilitation.

003TPPFI6	Fixed Prosthesis Hands-on 2	2 Cr.
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This required practical course in single-unit fixed prosthodontics, following the theoretical course, is offered in the second semester of the 3rd year. Students will perform all the steps involved in creating a 3-unit provisional bridge on a simulated model.

003TPPFI3	Single Fixed Prosthesis Hands-on 1	1 Cr.
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This required practical course in single-unit fixed prosthodontics, following the theoretical course, is offered in the 2nd year (semester 3). Students will prepare a single tooth on a simulated model for prosthetic rehabilitation.

003TPPFI4	Single Fixed Prosthesis Hands-on 2	2 Cr.
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This required practical course in single-unit fixed prosthodontics, following the theoretical course, is offered in the 2nd year, 4th semester.

Students will fabricate a provisional restoration on a prepared tooth on a simulated model for prosthetic rehabilitation.

003TPPAI3	Acrylic Partial Prosthesis Hands-on 1	1 Cr.
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By the end of this course, students should be able to perform the initial laboratory steps for the fabrication of an acrylic partial denture on a simulated model.

003TPPAI4	Acrylic Partial Prosthesis Hands-on 2	1 Cr.
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By the end of this course, students should be able to perform the final laboratory steps for the fabrication of a partial denture.