

DOCTOR OF DENTAL SURGERY

Main Language of Instruction:

French English Arabic

Campus Where the Program Is Offered: CSM

OBJECTIVES

The Faculty of Dental Medicine at the Saint Joseph University of Beirut is dedicated to training future oral health professionals. Its primary goal is to provide high-quality education, combining theoretical knowledge and practical skills, training 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 commcoursey. 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 commcoursey.

PROGRAM LEARNING OUTCOMES (COMPETENCIES)

- Apply knowledge from fundamental medical and technological sciences in dental practice.
- Plan a dental treatment based on diagnosis and prognosis, taking into account the patient's psychological and socio-economic conditions.
- Provide preventive and curative dental care tailored to individual patient needs.
- Communicate effectively with all stakeholders in the dental profession.
- Manage a dental office following ergonomic, safety, and asepsis standards recommended by international health authorities.
- Practice dentistry in accordance with ethical principles, jurisprudence, and professional ethics.
- Take charge of professional development and foster an analytical and innovative mindset.
- Participate in the improvement of public oral health in accordance with national and international health policies and with a commcoursey-oriented perspective.

PROGRAM REQUIREMENTS

300 credits: Required courses (282 credits), Institution's elective courses (12 credits), Open elective courses (6 credits).

USJ General Education Program (33 credits - may be part of the above categories).

USJ General Education Program (33 Cr.)

English (4 Cr.)

English Level A (4 Cr.) (Out of curriculum)

Arabic (4 Cr.)

Lebanese Issues (2 Cr.)

Course taught in Arabic (2 Cr.)

Emergency Care (2 Cr.)

Humanities (8 Cr.)

Ethics (2 Cr.)

Fundamental Ethics (2 Cr.)

Religious Studies (2 Cr.)

USJ Values in Daily Life (2 Cr.)

Civic and Citizenship Engagement (2 Cr.)

Voluntary and Citizen Action (2 Cr.)

Other (2 Cr.)

Conflict Management in the Medical-Dental Field (2 Cr.)

Social Sciences (6 Cr.)

Coaching Approach to Career Success (2 Cr.)

Healthcare and Economic Institution Management (2 Cr.)

Basics of Financial Analysis (1 Cr.)

Accounting and Introduction to Financial Statements (1 Cr.)

Communication Techniques (5 Cr.)

Expression and Communication (4 Cr.)

Public Speaking (1 Cr.)

Quantitative Techniques (6 Cr.)

Mathematics (2 Cr.)

Applied Computing in Dentistry (2 Cr.)

Artificial Intelligence and Digital Technologies in the Medical Field (1 Cr.)

Epidemiology and Biostatistics Applied to Dentistry (1 Cr.)

Fundamental Courses

Required Courses (282 Cr.), including ECTS credits from USJ General Education Program.

Voluntary and Citizen 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.). Topographic General Human Anatomy: Head and Neck (2 Cr.). Pathological Anatomy (2 Cr.). General and Ambulatory Anesthesia (1 Cr.). Local Anesthesia + Exodontics (2 Cr.). Medical and Dental English (1 Cr.). Medical and Dental English (2 Cr.). Application of New Digital and Artificial Technologies (1 Cr.). Fundamental and Therapeutic Orthodontics + Clinic (3 Cr.). Metabolic and Clinical 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 Cr.). Oral Surgery Clinic (1 Cr.). Oral Surgery Clinic (1 Cr.). Oral Surgery Clinic 1 (2 Cr.). Pediatric Dentistry Clinic (2 Cr.). Pediatric Dentistry Clinic (2 Cr.). Restorative Dentistry Clinic (Multidisciplinary Mode) (2 Cr.). Restorative Dentistry Clinic (Multidisciplinary Mode) (2 Cr.). Restorative Dentistry Clinic (Multidisciplinary Mode) (2 Cr.). Endodontics Clinic 1 (Multidisciplinary Mode) (3 Cr.). Endodontics Clinic (Multidisciplinary Mode) (3 Cr.). Endodontics Clinic (Multidisciplinary Mode) (3 Cr.). Endodontics Clinic + Lab (Multidisciplinary Mode) (3 Cr.). Oral Medicine Clinic (Multidisciplinary Mode) (2 Cr.). Oral Medicine Clinic (Multidisciplinary Mode) (1 Cr.). Oral Medicine and Radiology Clinic (Multidisciplinary Mode) (1 Cr.). Oral Medicine and Radiology Clinic (Multidisciplinary Mode) (1 Cr.). Oral Medicine and Radiology Clinic (Multidisciplinary Mode) (1 Cr.). Oral Medicine and Radiology Clinic (Multidisciplinary Mode) (1 Cr.). Orthodontics Clinic (1 Cr.). Orthodontics Clinic (1 Cr.). Periodontology Clinic (Multidisciplinary Mode) (2 Cr.). Periodontology Clinic (Multidisciplinary Mode) (2 Cr.). Periodontology Clinic (Multidisciplinary Mode) (2 Cr.). Periodontology Clinic (Multidisciplinary Mode) (2 Cr.). Removable Prosthesis Clinic (2 Cr.). Removable Prosthesis Clinic (2 Cr.). Fixed Prosthesis Clinic (3 Cr.). Fixed Prosthesis Clinic (3 Cr.). Fixed Prosthesis Clinic (3 Cr.). Fixed Prosthesis + Occlusion 1 (Multidisciplinary Mode) (3 Cr.). Radiology Clinic (1 Cr.). Radiology Clinic (1 Cr.). Accounting and Introduction to Financial Statements (1 Cr.). Infection Control and Ergonomics (1 Cr.). Commcoursey Dentistry (1 Cr.). Digital Dentistry (1 Cr.). Digital Dentistry and Artificial Intelligence (1 Cr.). Restorative Dentistry (1 Cr.). Restorative and Aesthetic Dentistry (1 Cr.). Restorative and Aesthetic Dentistry (1 Cr.). Dental Development and Histology 1 (2 Cr.). Dental Development and Histology 2 (1 Cr.). Research Protocol Development (1 Cr.). Endodontics (2 Cr.). Endodontics (2 Cr.). Endodontics (1 Cr.). Lebanese Issues (2 Cr.). Environment and Biodiversity (1 Cr.). Epidemiology and Biostatistics Applied to 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 and Economic Institutions (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 Computing in Dentistry

(2 Cr.). Introduction to Research in Dentistry (1 Cr.). Innovation + Lab (1 Cr.). Innovation + Lab (1 Cr.). Artificial Intelligence and Digital Technologies in the Medical Field (1 Cr.). Radiological Interpretation (1 Cr.). Introduction to Multidisciplinary Clinical Practice (1 Cr.). Introduction to Bibliographic Research (1 Cr.). Multidisciplinary Geriodontology (1 Cr.). Coaching Approach for 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 Cr.). Dental Materials (1 Cr.). Dental Materials (1 Cr.). Mathematics (2 Cr.). Forensic Medicine (1 Cr.). Thesis and Defense (4 Cr.). Scientific Writing Methodology (1 Cr.). General Microbiology (2 Cr.). Specific Microbiology and Oral Microbiology + Lab (3 Cr.). Clinical Observation 1 (1 Cr.). Clinical Observation 2 (2 Cr.). Clinical Observation 3 (2 Cr.). Clinical Observation 4 (2 Cr.). Occlusodontics (1 Cr.). Occlusodontics (1 Cr.). Pediatric Dentistry (1 Cr.). Pediatric Dentistry (1 Cr.). Professional Organization (in Arabic) (1 Cr.). Periodontology (2 Cr.). Periodontology (2 Cr.). Dental Pathology (2 Cr.). Dental Pathology (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 (3 Cr.). Thesis Project (1 Cr.). Removable Prosthesis (1 Cr.). Removable Prosthesis (2 Cr.). Removable Prosthesis (1 Cr.). Removable Prosthesis (2 Cr.). Fixed Prosthesis (1 Cr.). Fixed Prosthesis Plural (2 Cr.). Fixed Prosthesis Course (1 Cr.). Implant Prosthesis + Lab (2 Cr.). Medical Psychology (1 Cr.). Public Speaking (1 Cr.). Radiology and Radioprotection (2 Cr.). Problem Solving APP (2 Cr.). Problem Solving APP (1 Cr.). Clinical Rotation (2 Cr.). Pathological Semiotics (2 Cr.). Pathological Semiotics (1 Cr.). Emergency Care (in Arabic) 1 (1 Cr.). Emergency Care (in Arabic) 3 (1 Cr.). Emergency Care + Lab (in Arabic) (1 Cr.). Dental Anatomy Lab 1 (2 Cr.). Dental Anatomy Lab 2 (2 Cr.). Pathological Anatomy Lab (1 Cr.). Biology + Histology Lab (1 Cr.). Commcoursey Lab (1 Cr.). Digital Dentistry Lab (1 Cr.). Restorative Dentistry Lab (3 Cr.). Restorative Dentistry Lab (1 Cr.). Restorative Dentistry Lab (2 Cr.). Restorative Dentistry Lab (1 Cr.). Dental Development and Histology Lab (1 Cr.). Endodontics Lab (2 Cr.). Endodontics Lab (2 Cr.). Ergonomics and Infection Control Lab (2 Cr.). Occlusodontics Lab (1 Cr.)

Institution's Elective Courses (12 Cr.)

12 credits to choose from the following list:

Nutrition and Oral Health (2 Cr.). Etiquette Basics (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 (2 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.). Arabic Language and Media (2 Cr.)

Open Elective Courses (6 Cr.)

SUGGESTED STUDY PLAN

Semester 1

Code	Course Name	Credits
015ABC2L3	Voluntary and Citizen Action	2
003ANDE11	Dental Anatomy	1
003AHG111	General Human Anatomy 1	2
003BICL11	Cell Biology	2
003CHIG11	General Chemistry	2
003ENLI11	Lebanese Issues	2
003EVBII1	Environment and Biodiversity	1
018ETHIL1	Fundamental Ethics	2
003EXCO11	Expression and Communication 1	2
003INRBI1	Introduction to Bibliographic Research	1
003MATSH1	Mathematics	2
003OBCL11	Clinical Observation 1	1
003PHYOI1	Physiology 1	2

003PHYS1	Physics	2
003SOIU1	Emergency Care (in Arabic) 1	1
003TPAD1	Dental Anatomy Lab 1	2
435LALML2	Arabic Language and Media	2
003NUFO1	Nutrition and Oral Health	2
	Total	31

Semester 2

Code	Course Name	Credits
003ANDE12	Dental Anatomy 2	1
003AHG212	General Human Anatomy 2	2
003BIMO12	Molecular Biology	1
003CORGI2	Organic Chemistry	2
003EPST12	Epidemiology and Biostatistics Applied to Dentistry	1
003EXC212	Expression et communication 2 – Expression and Communication 2	2
003CONF12	Conflict Management in the Medical-Dental Field	2
003HIST12	Histology	2
003INFO12	Applied Computer Science in Dentistry	2
003IATNI2	Artificial Intelligence and Digital Technologies in the Medical Field	1
003COAT12	Coaching Approach for Career Success	2
064VALEL1	USJ Values in Daily Life	2
003OBCL12	Clinical Observation 2	2
003PHYS12	Physiology 2	1
003TPAD12	Dental Anatomy Lab 2	2
003TPBH12	Biology + Histology Lab	1
003NSDV12 / 003SENA12	Basics of Etiquette / Awareness of Anxiety (students choose one of these two Institution's Elective Courses)	1
003SENA12		1
	Total	27

Semester 3

Code	Course Name	Credits
003AHG313	General Human Anatomy 3	2
003ANGL13	Medical and Dental English	1
003BIOS13	Structural Biochemistry	2
003COIE13	Infection Control and Ergonomics	1
003DEDI13	Digital Dentistry	1
003DENR13	Restorative Dentistry	1
003DEHI13	Dental Development and Histology	2
003GSTR13	Stress and Communication Management in the Dental Office	1
003MATDI3	Dental Materials	1

003MICI3	General Microbiology	2
003OCLII3	Clinical Observation 3	2
003PHYSI3	Special Physiology	3
003PROAI3	Removable Prosthesis	2
003PRFUI3	Single Fixed Prosthesis	1
003PSYMI3	Medical Psychology	1
003SEMEI3	Pathological Semiotics	1
003TPDRI3	Restorative Dentistry Lab	1
003TPPFI3	Single Fixed Prosthesis Lab	1
003TPPAI3	Acrylic Partial Prosthesis Lab	1
003GENEI3	Genetics	1
0102227L1	Introduction to Photography	2
003MDEPI3	Back Pain: Etiology and Prevention	1
	Total	31

Semester 4

Code	Course Name	Credits
003AHGTI4	Topographic General Human Anatomy: Head and Neck	2
003ANGLI4	Medical and Dental English	2
003BIMCI4	Metabolic and Clinical Biochemistry	2
003DEPCI4	Commcoursey Dentistry	1
003DER2I4	Restorative and Aesthetic Dentistry	1
003DEHII4	Dental Development and Histology 2	1
003HÉMII4	Hematology and Immunology	2
003INREI4	Introduction to Dental Research	1
003MATDI4	Dental Materials	1
003OCLII4	Clinical Observation 4	2
003PATDI4	Dental Pathology	2
003PUSPI4	Public Speaking	1
003APPRI4	Problem Solving APP	2
003SÉMPI4	Pathological Semiotics	2
003TPDRI4	Restorative Dentistry Lab	1
003TPDHI4	Dental Development and Histology Lab	1
003TPPFI4	Single Fixed Prosthesis Lab	2
003TPPAI4	Acrylic Partial Prosthesis Lab	1
003BIOGI4	General Biology	2
	Total	29

Semester 5

Code	Course Name	Credits
003DDIA15	Digital Dentistry and Artificial Intelligence	1
003DER115	Restorative and Aesthetic Dentistry	1
003ENDO15	Endodontics	2
003INSMI5	Introduction to Multidisciplinary Clinic	1
003MATDI5	Dental Materials	1
003PARO15	Periodontology	2
003PATDI5	Dental Pathology	2
003PRA115	Removable Prosthesis	1
003PRFPI5	Multiple Fixed Prosthesis	2
003RADII5	Radiology and Radioprotection	2
003APPRI5	Problem Solving APP	1
003TPR115	Restorative Dentistry Lab	2
003TPE115	Endodontics Lab	2
003TPER15	Ergonomics and Infection Control Lab	2
003TPA115	Removable Prosthesis Lab	2
003TPPF15	Fixed Prosthesis 1 Lab	2
003APSSI5	Psychosocial Aspects of Health	2
070EDTNM1	Digital Text Editing	2
003INMDI5	Nanotechnology Investment in Medical-Dental Import and Export	1
	Total	31

Semester 6

Code	Course Name	Credits
003ANAPI6	Pathological Anatomy	2
003AGAMI6	General and Ambulatory Anesthesia	1
003ALEXI6	Local Anesthesia + Exodontics	2
003CLDGI6	Oral Medicine and Radiology Clinic	1
003END216	Endodontics	1
003GDESI6	Management of Health and Economic Institutions	2
003MERSI6	Scientific Writing Methodology	1
003MICRI6	Specific Microbiology and Oral Microbiology Lab	3
003OCCLI6	Occlusodontics	1
003PRA216	Removable Prosthesis	1
003ROCLI6	Clinical Rotation	2
003SOIUI6	Emergency Care + Lab (in Arabic) 2	1
003TPAPI6	Pathological Anatomy Lab	1
003TPR216	Restorative Dentistry Lab	3
003TPE216	Endodontics Lab	2

003TPOCI6	Occlusodontics Lab	1
003TPPAI6	Periodontology Lab	1
003TPA2I6	Removable Prosthesis Lab	1
003TPFII6	Fixed Prosthesis 2 Lab	2
003SBSPI6	Physical and Oral Health of the Young Adult	2
	Total	31

Semester 7

Code	Course Name	Credits
003CHORS1	Oral Surgery	2
003CCO1S1	Oral Surgery Clinic	1
003CLD1S1	Restorative Dentistry Clinic (Multidisciplinary Mode)	2
003CEN1S1	Endodontics Clinic 1 (Multidisciplinary Mode)	3
003CMORS1	Oral Medicine and Radiology Clinic (Multidisciplinary Mode)	1
003CLP1S1	Periodontology Clinic (Multidisciplinary Mode)	2
003CPC1S1	Fixed Prosthesis Clinic	3
003ENDOS1	Endodontics	2
003IMPCS1	Surgical Implantology	1
003INNOS1	Innovation + Lab	1
003INRAS1	Radiological Interpretation	1
003ODOPS1	Pediatric Dentistry	1
003PAROS1	Periodontology	2
003PATOS1	Oral and Surgical Pathology	2
003PHARS1	Pharmacology	2
003PRA1S1	Removable Prosthesis	2
003PRCFS1	Fixed Prosthesis	1
003TPOPS1	Pediatric Dentistry Lab	1
003TPA1S1	Removable Prosthesis Lab 1	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	1
003CLD2S2	Restorative Dentistry Clinic (Multidisciplinary Mode)	2
003CTE2S2	Endodontics Clinic + Lab (Multidisciplinary Mode)	3
003CMORS2	Oral Medicine and Radiology Clinic (Multidisciplinary Mode)	1
003CLP2S2	Periodontology Clinic (Multidisciplinary Mode)	2
003CPC2S2	Fixed Prosthesis Clinic	3
003CIEFS2	Accounting and Introduction to Financial Statements	1

003PRORS2	Development of a Research Protocol	1
003MRCPS2	Practical and Operational Management of the Dental Office	1
003INNOS2	Innovation + Lab	1
003OCCLS2	Occlusodontics	1
003ODOPS2	Pediatric Dentistry	1
003PORTS2	Portfolio	2
003PITPS2	Implant Prosthesis + Lab	2
003TPCOS2	Community Lab	1
003TPDDS2	Digital Dentistry Lab	1
003TPA2S2	Removable Prosthesis Lab	1
	Total	29

Semester 9

Code	Course Name	Credits
003ANARS3	Article Analysis	1
003CCO1S3	Oral Surgery Clinic 1	2
003CDP1S3	Pediatric Dentistry Clinic	2
003CDR1S3	Restorative Dentistry Clinic (Multidisciplinary Mode)	2
003CEN1S3	Endodontics Clinic (Multidisciplinary Mode)	3
003CMO1S3	Oral Medicine Clinic (Multidisciplinary Mode)	1
003CLO1S3	Orthodontics Clinic	1
003CLP1S3	Periodontology Clinic (Multidisciplinary Mode)	2
003CPA1S3	Removable Prosthesis Clinic	2
003CPC1S3	Fixed Prosthesis + Occlusion 1 Clinic (Multidisciplinary Mode)	3
003CLRAS3	Radiology Clinic	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	29

Semester 10

Code	Course Name	Credits
003CCHOS4	Oral Surgery Clinic	1
003CDP2S4	Pediatric Dentistry Clinic	2
003CDR2S4	Restorative Dentistry Clinic (Multidisciplinary Mode)	2
003CEN2S4	Endodontics Clinic (Multidisciplinary Mode)	3

003CMO2S4	Oral Medicine Clinic (Multidisciplinary Mode)	2
003CLO2S4	Orthodontics Clinic	1
003CLP2S4	Periodontology Clinic (Multidisciplinary Mode)	2
003CPA2S4	Removable Prosthesis Clinic	2
003CPC2S4	Fixed Prosthesis Clinic	3
003CLRAS4	Radiology Clinic	1
003LSPDS4	Legislation on the Practice of Dental Medicine in Lebanon (in Arabic)	1
03MLEGS4	Forensic Medicine	1
003MEMOS4	Thesis and Defense	4
003PCIPS4	Interprofessional Clinical Case Presentation	1
003PROBS4	Oral, Written, and Portfolio Examination	3
003SOIUS4	Emergency Care (in Arabic) 3	1
003TUTOS4	Guidance + Multidisciplinary Clinic	1
	Total	31

COURSE DESCRIPTION

015ABC2L3 Voluntary and Citizen Action 2 Cr.

This course is part of the USJ General Education Program. It aims to raise awareness among all students about the importance of their involvement in civic life by providing them with opportunities to engage in various volunteer activities. The course consists of two components: theoretical instruction and supervised practical activities.

003ANARS3 Article Analyses 1 Cr.

By the end of this course, students will be able to evaluate a multidisciplinary article and judge its scientific validity to justify the application of its results.

003ANDEI1 Dental Anatomy 1 1 Cr.

Dental anatomy is one of the basic sciences in dentistry. It is a required course taught in the first year, and is directly related to the practice of the dental profession, as its knowledge is involved in all specialties of dentistry that address the morphological restoration of altered or missing dental organs. By the end of this course, students should recognize the descriptive, topographic, comparative and functional anatomy of permanent teeth. This course is delivered through lectures and interactive tutorial sessions, using a computer-assisted presentation program. The Tooth Atlas 8 software enables exploration of the morphology of teeth in 3D and consolidate students' knowledge.

003ANDEI2 Dental Anatomy 2 1 Cr.

Dental anatomy is one of the basic sciences in dentistry. It is a required course taught in the first year, and is directly related to the practice of the dental profession, as its knowledge is involved in all specialties of dentistry that address the morphological restoration of altered or missing dental organs. By the end of this course, students should recognize the descriptive, topographic, comparative and functional anatomy of permanent teeth. This course is delivered through lectures and interactive tutorial sessions, using a computer-assisted presentation program. The Tooth Atlas 8 software enables exploration of the morphology of teeth in 3D and consolidate students' knowledge.

003AHG1I1 General Human Anatomy 1 2 Cr.

This required course is taught in the first semester of the first year. It introduces the description of human anatomical structures, focusing on the bony elements of the head and neck. This course presents these structures using international terminology (PNA) and the specific lexicon of anatomical science.

By the end of this course, students should be able to describe in detail the different bones and cavities of the human skull to recognize the bony structures of the human body.

003AHG212	General Human Anatomy 2	2 Cr.
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This required course is taught in the first semester of the first year. It introduces the systematic description of the muscles and vascular networks of the human body, with a detailed focus on the muscular and vascular elements of the orofacial sphere.

By the end of this course, students should be able to recognize the different muscular elements and groups, as well as the vascular networks in the head and neck.

003AHG313	General Human Anatomy 3	2 Cr.
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This required course is taught in the first semester of the first year. It introduces the systematic description of the central nervous system, cranial nerves, and the different cavities of the human body.

By the end of this course, students should be able to describe the different motor and sensory nervous circuits of head cavities, as well as the human body cavities and the anatomical relationships between the organs they contain.

003AHGT14	Human Anatomy: Head and Neck Topography	2 Cr.
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This required course is taught in the second semester of the second year. It covers the topographic description of the different orofacial regions and of the neck. By the end of this course, students will be able to 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 required course is taught in the 3rd year and is complemented by a practical lab. By the end of this course students will be able 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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By the end of this course, students will become familiar with:

General anesthesia, its principles, risks and complications, and how to manage them.

The principles of neuraxial blocks and loco regional techniques, along with their risk and complications.

The preoperative assessment and evaluation of the patient, as these are crucially importante.

003ALEXI6	Local Anesthesia and Exodontia	2 Cr.
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This course provides students with a thorough understanding of local anesthesia techniques and the principles of exodontia (tooth extraction). They will learn to effectively administer local anesthesia, prepare patients for dental extractions, and manage peri- and post-operative complications.

003ANGLI3	Medical and Dental English	1 Cr.
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This course is taught in the first semester of the second year of the bachelor's degree. It introduces essential English language skills for dental practice. It equips students with the foundational terminology and concepts in general medicine that are relevant to dentistry. Students will also develop language skills needed for writing scientific articles. The course focuses on building both oral and written communication skills for effective interaction in English-speaking dental settings.

003ANGLI4	Medical & Dental English	2 Cr.
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This course is taught in the first semester of the second year of the bachelor's degree. It introduces essential English language skills for dental practice. It equips students with the foundational terminology and concepts in general medicine that are relevant to dentistry. Students will also develop language skills needed for writing scientific articles. The course focuses on building both oral and written communication skills for effective interaction in English-speaking dental settings.

003ATNAS2	Application of New Digital and Artificial Technologies	1 Cr.
<p>This required course is taught in the fourth year of dental medicine. It guides students in managing clinical cases through a digital workflow. It also introduces strategies for using social media effectively for professional purposes.</p>		
003APSSI5	Psychosocial Aspects of Health	2 Cr.
<p>This course emphasizes the importance of maintaining a balanced approach to physical and mental health. It highlights how a healthy equilibrium between these aspects supports personal growth, enhances professional performance, and strengthens social relationships.</p>		
003BFTHS2	Fundamental Bases and Orthodontic Therapies + Practical work	3 Cr.
<p>This required course is taught in the fourth year. It enables students to recognize the problems linked to the development of dentition and occlusion. By the end of the course, students will be able to describe prevention, interception and correction in orthodontics using appropriate appliances. They will also gain knowledge of digital dentistry and the role of artificial intelligence in orthodontics. Theoretical knowledge is reinforced with practical work focused on cephalometric analysis, space analysis, and foundational knowledge of aligners, preparing students to make accurate diagnoses for each patient.</p>		
003BIMCI4	Clinical & Metabolic Biochemistry	2 Cr.
<p>This course, taught in the second semester of the second year, 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 like diabetes, liver, acid-base balance.</p>		
003BIOSI3	Structural Biochemistry	2 Cr.
<p>This course covers the structure and role of macromolecules found in a living animal cell, including proteins, sugars, lipids and nucleic acids.</p>		
003BICLI1	Cell Biology	2 Cr.
<p>This course familiarizes students with the organelles of eukaryotic and prokaryotic cells, exploring the methods used to study their components and organization. It details cell observation techniques, including optical and electron microscopy, their principle, as well as the preparation and staining of samples. Students will gain in-depth knowledge of cellular organelles such as mitochondria, nucleus (including nucleolus and membrane), smooth and rough endoplasmic reticulum, Golgi apparatus, lysosomes, and peroxisomes—their functions, compartmentalization, and molecular composition. Additionally, the course covers cellular junctions, components of the cytoskeleton (e.g., cilia and flagella), and the cell cycle.</p>		
003BIOGI4	General Biology	2 Cr.
<p>This course provides essential knowledge in biology for students in life sciences (general medicine, dental medicine, pharmacy, etc.) helping them develop a comprehensive understanding of ‘life’ and its characteristics. By the end of this course, students will be introduced to the living world and its diversity, enabling them to distinguish between bacteria, viruses, protozoa, and others, as well as understand their particularities and roles. Furthermore, this course covers the different characteristics of living organisms, focusing on reproduction, adaptation, and evolution, while highlighting the various deregulations and challenges that currently threaten life (cancer, aging, etc.).</p>		
003BIMOI2	Molecular Biology	1 Cr.
<p>This course covers the main advances in modern biology essential for students in Medical Science. Positioned at the intersection of biochemistry and genetics, it requires students to thoroughly understand nucleic acid structure and properties. By the end of the course, students will have assimilated fundamental principles of genetic material transmission and repair, gene expression, and regulatory mechanisms. Students must be able to interpret experimental results from the most common molecular biology techniques applied to biomedical research and medical biology laboratories for genetic material analysis.</p>		

003CHIG1	General Chemistry	2 Cr.
<p>This course allows students to build the essential chemical base to tackle advanced training by stimulating the critical and scientific mindset of future dental surgeons. It aims to provide the necessary scientific information to understand the physicochemical properties of matter, from the microscopic to the macroscopic scale.</p>		
003CORGI2	Organic Chemistry	2 Cr.
<p>This course aims to provide students with the basic principles of organic chemistry. In particular, it covers naming the main functions in organic chemistry, recognizing the properties of stereoisomers, using spectral methods to identify an organic compound, and familiarizing students with the concepts of reaction mechanisms and reactivity.</p>		
003CHORS1	Oral Surgery	2 Cr.
<p>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 will be given to the prevention and management of potential complications.</p>		
003CCO1S1	Clinical Oral Surgery 1	1 Cr.
<p>This course prepares students to master the techniques for administering local and regional dental anesthesia and to develop skills for choosing the most suitable technique based on the procedure and patient's needs. It covers evaluating the medical and dental conditions of the patient for tooth extraction, providing a comprehensive understanding of anatomical principles related to dental extractions, and developing technical skills to perform precise and effective extractions. Emphasis is placed on the role of postoperative care in the healing process, including advising patients on minimizing discomfort and reducing the risk of complications. By the end of this course, students will be equipped to perform dental extractions with a focus on effective pain management, patient safety, and the prevention of complications throughout the process.</p>		
003CCO2S2	Oral Surgery Clinic	1 Cr.
<p>This course prepares students to master the techniques for administering local and regional dental anesthesia and to develop skills for choosing the most suitable technique based on the procedure and patient's needs. It covers evaluating the medical and dental conditions of the patient for a tooth extraction, providing a comprehensive understanding of anatomical principles related to dental extractions, and developing technical skills to perform precise and effective extractions. Emphasis is placed on the role of postoperative care in the healing process, including advising patients on minimizing discomfort and reducing the risk of complications. By the end of this course, students will be equipped to perform dental extractions with a focus on effective pain management, patient safety, and the prevention of complications throughout the process.</p>		
003CCHOS4	Oral Surgery Clinic 2	1 Cr.
<p>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.</p>		
003CCO1S3	Oral Surgery Clinic 1	2 Cr.
<p>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</p>		

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	Clinical Pediatric Dentistry	2 Cr.
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This course prepares students to establish comprehensive pediatric dental treatment plans, care for young patients, and deliver essential pediatric dental therapies. Students will perform clinical procedures with a focus on maintaining ergonomic and aseptic conditions.

003CDP2S4	Clinical Pediatric Dentistry	2 Cr.
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This course prepares students to establish comprehensive pediatric dental treatment plans, care for young patients, and deliver essential pediatric dental therapies. Students will perform clinical procedures with a focus on maintaining ergonomic and aseptic conditions.

003CLD1S1	Clinical Restorative Dentistry (In Multidisciplinary Mode)	2 Cr.
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This required course is taught in the first semester of the 4th year of dentistry, and involves clinical work with patients.

It aims to equip students with the skills to diagnose and treat patients with carious and non-carious lesions of simple complexity, using appropriate material.

003CDR1S3	Clinical Restorative Dentistry (In Multidisciplinary Mode)	2 Cr.
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This required course is taught in the third semester of the 5th year of dentistry, and involves clinical work with patients.

It aims to equip students with the skills to diagnose and treat patients with carious and non-carious lesions of simple complexity, using appropriate material.

003CLD2S2	Clinical Restorative Dentistry (In Multidisciplinary Mode)	2 Cr.
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This required course is taught in the second semester of the 4th year of dentistry, and involves clinical work with patients.

It aims to equip students with the skills to diagnose and treat patients with carious and non-carious lesions of simple complexity, using appropriate material.

003CDR2S4	Clinical Restorative dentistry (In Multidisciplinary Mode)	2 Cr.
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This required course is taught in the third semester of the 5th year of dentistry, and involves clinical work with patients.

It aims to equip students with the skills to diagnose and treat patients with carious and non-carious lesions of simple complexity, using appropriate material.

003CEN1S1	Clinical Endodontics 1 (In Multidisciplinary Mode)	3 Cr.
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Preclinical work + Clinical internships

003CEN1S3	Endodontic Clinic (Multidisciplinary)	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	Endodontic Clinic (Multidisciplinary)	3 Cr.
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This course equips students with the clinical skills and scientific knowledge necessary to perform endodontic treatment on single-rooted and multi-rooted teeth. Students will learn to establish accurate diagnoses of pulpal

and periradicular pathologies, complete endodontic treatment on multi-rooted teeth, remove posts, and perform multiple retreatments on single-rooted and multi-rooted teeth.

003CTE2S2 Endodontics Clinic + Practical Work (Multidisciplinary Mode) 3 Cr.

This course equips students with the clinical skills and scientific knowledge necessary to perform root canal treatment on single-rooted and multi-rooted teeth.

003CMO2S4 Oral Medicine Clinic 2 (Multidisciplinary) 2 Cr.

This course is taught in the 5th year and presents complex clinical cases to help students deepen their knowledge and apply the diagnostic skills acquired in previous years.

003CMO1S3 Oral Medicine Clinic (Multidisciplinary) 1 Cr.

This course is taught in the 5th year and presents complex clinical cases to help students deepen their knowledge and apply the diagnostic skills acquired in previous years.

003CMORS1 Clinical Oral Medicine and Radiology (In Multidisciplinary Mode) 1 Cr.

This course aims to develop the skills essential for dental practice, with particular emphasis on effective communication with patients, gathering relevant medical information, taking a thorough history, performing a complete extraoral and intraoral clinical examination, justifying, indicating, and interpreting radiographs, and formulating a treatment plan tailored to the patient's needs. In radiology, the objectives are to apply the principles of radiological protection, acquire technical skills, and master the visualization and interpretation of radiographs.

003CMORS2 Clinical Oral Medicine and Radiology (In Multidisciplinary Mode) 1 Cr.

This course aims to develop the skills essential for dental practice, with particular emphasis on effective communication with patients, gathering relevant medical information, taking a thorough history, performing a complete extraoral and intraoral clinical examination, justifying, indicating, and interpreting radiographs, and formulating a treatment plan tailored to the patient's needs. In radiology, the objectives are to apply the principles of radiological protection, acquire technical skills, and master the visualization and interpretation of radiographs.

003CLDGI6 Oral Medicine Clinic and Radiology 1 Cr.

This course provides students with a practical introduction to dental consultation and radiology. They will learn how to establish a trusting relationship with patients, take a full medical history, explain dental procedures clearly, and apply the hygiene standards needed to work in an aseptic environment. In addition, students will acquire an understanding of the basic principles of oral radiology and become familiar with software for image acquisition and visualization.

003CLO1S3 Orthodontics Clinic 1 Cr.

This required course is taught in the fifth year. By the end of this course, students will be able to conduct a clinical examination to establish an orthodontic diagnosis as well as master dentist-patient communication.

003CLO2S4 Orthodontics Clinic 1 Cr.

This required course is taught in the fifth year. By the end of it, students will be able to conduct a clinical examination to establish an orthodontic diagnosis as well as master dentist-patient communication.

003CLP1S3 Periodontology Clinic (Multidisciplinary) 2 Cr.

This required course is taught in the fifth year. It covers non-surgical treatment of moderate and advanced periodontal disease in a multidisciplinary context.

003CLP1S1 Clinical Periodontology (In Multidisciplinary Mode) 2 Cr.

This required course is taught in the 4th year. It covers non-surgical treatment of periodontal disease.

003CLP2S2	Clinical Periodontology (In Multidisciplinary Mode)	2 Cr.
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This course provides students with knowledge of the clinical and radiological aspects of the patients' examinations, emphasizing the formulation of treatment plans. It covers the concepts of periodontal and occlusal considerations for long term prognosis, as well as various techniques for treatment and scaling to maintain periodontal health. Additionally, the course addresses the clinical and histological healing of periodontal tissues to enhance understanding of biological healing. This course aims to train better healthcare providers in clinical and radiological evaluation.

003CLP2S4	Periodontology Clinic (In Multidisciplinary Mode)	2 Cr.
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This required course is taught in the fifth year. It covers non-surgical treatment of moderate and advanced periodontal disease in a multidisciplinary context.

003CPA1S3	Clinic for Prosthesis Assistants 1	2 Cr.
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This required course constitutes the clinical internship in removable prosthodontics. It takes place in the first semester of the 5th year of the Doctor of Dental Surgery program, and applies the concepts learned in all theoretical subjects (ECTS code). By the end of this course, students should be able to treat patients at the care center using temporary partial removable dentures, skeletal dentures, or complete dentures.

003CPA2S4	Clinic for Prosthesis Assistants 2	2 Cr.
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This required course constitutes the clinical internship in removable prosthodontics. It takes place in the second semester of the 5th year of the Doctor of Dental Surgery program, and applies the concepts learned in all theoretical subjects (ECTS code). By the end of this course, students should be able to treat patients at the care center using temporary partial removable dentures, skeletal dentures, or complete dentures.

003CPC1S1	Clinical Fixed Prosthodontics	3 Cr.
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This required internship is conducted during the first semester of the 4th year. It covers single fixed prosthodontics that follows the theoretical course. By the end of the internship, students should be able to fabricate a definitive full-coverage crown on a prepared natural tooth in the patient's mouth.

003CPC2S2	Clinical Joint Prosthesis	3 Cr.
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This required internship is conducted during the first semester of the 4th year. It covers single fixed prosthodontics that follows the theoretical course. By the end of this internship, students should be able to create a full-coverage definitive crown on a prepared natural tooth in the patient's mouth.

003CPC2S4	Joint Prosthesis Clinic	3 Cr.
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This required internship is conducted during the second semester of the 5th year (S10). It covers plural fixed prosthodontics that follows the theoretical course and clinical internship of the 4th year. By the end of this internship, students should be able to create single crowns and full-coverage definitive bridges on natural prepared teeth and implants in patients' mouths.

003CPC1S3	Clinical Fixed Prosthodontics & Occlusion (In Multidisciplinary Mode)	3 Cr.
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This required clinical internship is conducted in the first semester of the 5th year S9 (code 003CPC2S4). It covers plural fixed prosthetics following the theoretical course and clinical internship of the 4th year. By the end of this internship, students should be able to create single crowns and full-coverage definitive bridges on prepared natural teeth and implants in patients' mouths.

003CLRAS4	Radiology Clinic	1 Cr.
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This course enhances students' skills in conducting oral and extra-oral radiographs, interpreting radiographic images, and composing accurate radiological reports.

003CLRAS3	Radiology Clinic	1 Cr.
This course enhances students' skills in conducting oral and extra-oral radiographs, interpreting radiographic images, and composing accurate radiological reports.		
003CIEFS2	Accounting & Introduction to Financial Statements	1 Cr.
This course empowers students to understand accounting principles and their significance in clinic management. Students will learn to effectively utilize accounting tools to enhance their professional practices.		
003COIEI3	Ergonomics and Infection Control	1 Cr.
This course aims to:		
<ol style="list-style-type: none"> 1. Highlight the importance of infection control in dental practice. 2. Familiarize students with the various infection control techniques. 3. Familiarize students with the dental chair, the work area and the dental office. 		
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 required course is offered in the second year of dental medicine. It covers the basics of digital dentistry and new technologies, as well as digital radiology and its clinical and academic applications.		
003DDIAI5	Digital Dentistry and Artificial Intelligence	1 Cr.
This required course is offered in the third year of dental medicine. It covers the digital dentistry workflow, starting with image acquisition and processing techniques, as well as computer-aided design and manufacturing.		
003DENRI3	Restorative Dentistry	1 Cr.
This required course is taught in semester I3 and is complemented by practical work (003TPDRI3). It describes the basic principles and materials used in direct restorations in restorative dentistry.		
003DER1I5	Restorative and Esthetic Dentistry	1 Cr.
This required course is taught in the 1 st semester of the 3rd year, and is complemented by a practical work (003TPR1I5). It enables students to recognize the different techniques and materials suitable in indirect restorations, whitening and non-invasive techniques.		
003DER2I4	Restorative and Esthetic Dentistry	1 Cr.
This required course is taught in the 1 st semester of the 3rd year, and is complemented by a practical work (003TPR1I5). It enables students to recognize the different techniques and materials suitable in indirect restorations, whitening and non-invasive techniques.		
003DEHI3	Development and Dental Histology 1	2 Cr.
This common and mandatory course is taught in the 2nd year. It enables students to understand and explore the histology and embryology of the tooth.		

003DEH14	Development & Dental Histology 2	1 Cr.
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By the end of this course, students will be able to:

- Recognize histological structures,
- Explain the normal development of an organ, diagnose anomalies, and identify innate or acquired pathologies along with their treatments.
- This common and mandatory course is taught in the 2nd year and enables students to understand and explore the histology and embryology of the tooth.

070EDTNM1	Digital Text Editing	2 Cr.
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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	Development of a Research Protocol	1 Cr.
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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.

003END015	Endodontics	2 Cr.
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This required course is taught in the third year, and 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.

003ENDOS1	Endodontics	2 Cr.
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This required course is taught in the third year and 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 filling simple and complex molars, conventional endodontics, the different phases of retreatments in these teeth, and the management of emergencies and complications.

003END216	Endodontics	1 Cr.
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This required course is taught in the third year and 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.

003ENLI1	Lebanese Issues	2 Cr.
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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.
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By the end of this course, students will be able to explain the multidisciplinary approach to the environment. They will be able to enumerate and describe various tools for assessing environmental quality vulnerability. Additionally, students will acquire the necessary knowledge to understand the functioning of our biosphere, including the living and non-living components of ecosystems, their interactions, the impact of humans on the environment, and remediation methods.

003EPST12	Epidemiology and Biostatistics Applied in Dentistry	1 Cr.
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This course familiarizes future graduate with the methods and concepts of descriptive statistics, the principles of statistical inferences, 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.
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This required course is taught during the first semester of the fifth year. It familiarizes students with the notions of morals, ethics and deontology, as well as ethical principles applicable to the dental profession. Student 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.
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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.
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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.
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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.
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This required course covers the basic genetics 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.

003GCDM12	Conflict Management in the Medical and 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 will employ an interactive format, featuring group exercises and role-playing scenarios.

003GDES16	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 involves the organization, coordination, planning, staffing, evaluation and control of health care services provided by hospitals. The primary goal of healthcare organizations is to provide quality patient care cost-effectively and safely

to 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 the issues of care of health and responses through economics.

003GSTR13	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 Practice	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, common life rules in a dental office, as well as prevention and management of relational conflicts.

003HIST12	Histology	2 Cr.
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This course explores the 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 covers the biological and clinical principles related to implant surgery, providing students with in-depth knowledge of fundamental implantology concepts for successful surgical outcomes. It familiarizes students with various implant systems, focusing on their unique characteristics, components, associated surgical techniques, and clinical considerations related to implant selection and treatment planning. Students will explore advancements and best practices in implant surgery, integrating biological perspectives to understand the healing process.

003INFO12	Applied Informatics in Dentistry	2 Cr.
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This course trains students to create professional documents using Microsoft Word, Excel, and PowerPoint.

- Word: Edit and format research papers, theses, and other types of text.
- Excel: Manage tables and perform data analysis.
- PowerPoint: Create and deliver engaging slideshows.

003INRE14	Introduction to Research in Dentistry	1 Cr.
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This course provides a solid foundation in dental research, preparing students to analyze, evaluate and conduct their own research by:

1. Understanding the structure of a scientific article and identifying its sections
2. Mastering scientific writing principles
3. Interpreting statistical results in articles
4. Understanding the scale of evidence and impact factor
5. Critically evaluating a scientific article using an assessment grid
6. Applying principles of evidence-based dentistry

003INNOS1	Innovation + Lab	1 Cr.
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This course equips students with a creative mindset and the 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. This course concludes with a project where students apply design thinking to a personal project.

003INNOS2	Innovation and Practical Work	1 Cr.
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Stimulation of Creativity & Innovative Thinking:

- Encourage students to cultivate creative and innovative thinking in dental medicine.
- Analyze existing needs and gaps in dental practices, equipment, and technologies.
- Identify opportunities for innovation to address specific challenges within the sector.
- Development of Research & Analytical Skills:
 - Train students to conduct comprehensive research on recent advancements in dental medicine.
 - Guide students through the process of designing dental innovations, including prototyping where feasible.
 - Focus on translating creative ideas into practical solutions that align with the needs of dental health professionals and patients.
- Strengthen communication skills to enable students to present their ideas and prototypes persuasively and clearly.
- Prepare students to effectively share their innovations with a range of audiences, including health professionals, investors, and potential collaborators.

003IATNI2	Artificial Intelligence and Digital Technologies in the Medical Field	1 Cr.
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This required first-year course provides a general overview of the artificial intelligence and its applications in medicine and dental medicine.

003INRAS1	Radiologic Interpretation	1 Cr.
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This course trains students to identify normal structures and radiographic abnormalities, and to analyze, interpret, and effectively communicate the results of radiological images within the context of dental and maxillofacial practice.

003INSMI5	Introduction to Clinical Multidisciplinarity	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 the 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 required first-year course enables students to identify high-quality scientific articles, describe the different steps of a scientific article, recognize the different types of scientific publications, and interpret scientific findings.

003INMDI5	Medical-Dental Nanotechnical Investment in Import and Export	1 Cr.
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This course enables students to:

- Master the steps required to import and export tools and raw materials.
- Connect with various official references in Lebanon.
- Describe a Technical Data Sheet & Material Safety Data Sheet.
- Invest in the national and international markets.
- Conduct thorough inspections of dental drugstores handling raw materials and tools.
- Increase labor return on investment by analyzing the different stages of EURO1.
- Learn and analyze international customs codes to avoid any gaps in the import and export of raw materials and dental tools.
- Connect with national and international resources to facilitate conferences on investment in dentistry.

003GEROS3	Multidisciplinary Gerodontology	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 provides students with an engaging and flexible way to explore the Arabic language and its rich culture. It offers insights into the use of Arabic in various forms of media, including visual, audio, and written journalism, as well as in advertisements across these formats. Through this course, students will develop practical linguistic skills in both oral and written communication, enhancing their proficiency and appreciation of the language.

003COAT12	Coaching Approach for Career Success	2 Cr.
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This course develops students' emotional and social skills using coaching approaches and tools. It covers both theoretical and practical aspects of emotional and social intelligence, stress and fear management, and building self-confidence to assert oneself and inspire confidence in others. Additionally, it focuses on effective communication and public speaking skills, including body language, facial expressions, voice modulation, and breathing techniques.

Students will acquire essential knowledge and skills to master public speaking and build the confidence needed to succeed in their careers. Furthermore, they will learn how to face daily challenges with a positive mindset, manage their internal saboteurs through positive intelligence and mental fitness, and honor their values through their behaviors and way of living.

003LSPDS4	Legislation on the Practice of Dentistry in Lebanon (in Arabic)	1 Cr.
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Students will learn about the practices of third-party payers in Lebanon and the application of social security to dental clinic employees.

003FDAFS3	The Fundamentals of Financial Analysis	1 Cr.
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This course allows students to evaluate the financial structure of their clinic. The analysis will include drafting a financial report that describes the present situation of the firm, and outlines the main financial directives for its future.

003MDEPI3	Back Pain: Etiology and Prevention	1 Cr.
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By the end of this course, students will be able to identify the primary causes of spinal pain and the associated risk factors in dentistry. They will also assess workplace comfort levels and learn recommendations to enhance operator comfort and efficiency.

064VALEL1	USJ Values in Daily Life	2 Cr.
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This course aims to familiarize students with the fundamental values of the Saint Joseph University of Beirut (USJ) so that they can integrate them into their personal, interpersonal, and professional lives. It engages them in critical reflection on how the values outlined in the USJ Charter can influence their behaviors, actions, and decisions in

addressing the challenges of the contemporary world. Additionally, students will become aware of global issues and ethical responsibilities, preparing them to positively contribute to the building of a better society.

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

003MATDI4	Dental Materials	1 Cr.
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The course offers essential insights into the materials used in dentistry, detailing the structure and chemistry that influence their behavior and performance.

003MATDI3	Dental Materials	1 Cr.
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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 be able to select and use dental biomaterials.

This course is taught in the 1st semester of the second year, and includes practical sessions, laboratory visits with practical work, video presentation, materials handling, lectures, research notes, and article analysis.

003MATSI1	Mathematics	2 Cr.
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This course presents the mathematical foundations of medicine, focusing on mathematical models of phenomena encountered in the field.

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:

- Present the roles and responsibilities of forensic doctors.
- Study techniques for identifying deceased individuals.
- Discern oral and facial lesions in criminal investigations.
- Identify the main classes of risks associated with medical treatments, including infections and diagnostic or treatment errors.
- Manage fees and relational issues between patients and practitioners.
- Examine therapeutic complications and associated responsibilities.
- Ensure informed patient consent and obtain necessary approvals.
- Study violations of professional secrecy and the associated sanctions.
- Define professional misconduct and analyze medical liability.

003MEMOS4	Thesis and Defense	4 Cr.
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This course facilitates the development of essential research skills. Students will be able to engage in research work specific to their discipline.

003MERSI6	Methodology of Scientific Writing	1 Cr.
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This course aims to teach the fundamental principles of scientific writing, enabling students to identify the essential characteristics of a scientific document and understand the standards of academic writing and statistics. It aims to develop in students the skills necessary to conduct rigorous research.

The course includes various components focused on:

1. Mastering summarization techniques: Learn to summarize scientific documents effectively.
2. Elaborating scientific writing: Acquire advanced scientific writing skills, and the different sections of a scientific article and their functions.
3. Using statistics in a scientific article: Learn to interpret and present data effectively.
4. Developing a research protocol: Identify the key elements of a solid protocol.
5. Presenting a research project: Acquire skills to present a research project clearly and convincingly.

003MICGI3	General Microbiology	2 Cr.
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This required course, taught in the second year, 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 Lab	3 Cr.
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This required third-year course describes the main microorganisms (bacteria, viruses and fungi) pathogenic to humans and the fundamental aspects of the infectious pathology associated with each. It includes an in-depth examination of key infectious pathologies relevant to dental practice and the microorganisms transmissible through healthcare. Practical work complements the theoretical and oral teaching provided.

This course contributes to the development of the following skills:

- Recognizing the main bacteria involved in human pathology, their diagnosis and a succinct treatment diagram.
- Recognizing the main viruses and fungal infections.

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. The course 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 basic nutrition course is designed for first- and second-year undergraduate 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.

003OBCLI1	Clinical Observation 1	1 Cr.
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Following this clinical training, first-year students will 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.

003OBCLI2	Clinical Observation 2	2 Cr.
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Following this clinical training, first-year students will 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.

003OCLI3	Clinical Observation 3	2 Cr.
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This clinical training enables students to:

- Identify the main reason for the patient's consultation and outline the history of the present illness, accurately recording the data as part of the patient's medical history, including recent medication prescriptions.
- Compile a file with the patient's medical data.
- Conduct appropriate extra-oral and intra-oral examinations
- Differentiate between periodontal health and periodontal disease.
- Differentiate between pulpal health, periapical health, pulpal disease, and periapical disease.
- Examine the dentition to detect carious lesions, wear patterns such as abrasion, attrition, erosion, and other hard dental tissue lesions.
- Locate and assess the extent and degree of carious lesions, dental wear patterns, and any other dental anomalies or injuries.
- Understand medical imaging methods applied in dentistry.

003OCLII4	Clinical Observation 4	2 Cr.
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By the end of this course, students will be able to welcome patients, describe patient examination procedures, cite dental nomenclature and associated equipment, and recognize the basics of ethics and professionalism.

003OCCLS2	Occlusodontics	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.

003OCCLI6	Occlusodontics	1 Cr.
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This required course is taught in the 3rd year, complemented by practical work (003TPC2I6), 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 remedy address masticatory system dysfunctions.

003ODOPS1	Pediatric Dentistry	1 Cr.
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By the end of this course, students should be able to develop a comprehensive pediatric dental treatment plan, take charge of a child patient effectively, and provide all necessary pediatric dental treatments.

003ODOPS2	Pediatric Dentistry	1 Cr.
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By the end of this course, students should be able to manage pediatric patients and provide all essential dental treatments for children.

003ORPLS3	Professional Organization (in Arabic language)	1 Cr.
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This common required course, taught in the 5th year, familiarizes students with their rights and obligations towards the Lebanese Dental Association, the Lebanese state, and their patients.

003PAROS1	Periodontics	2 Cr.
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This course trains students in diagnosing and developing treatment plans for patients with periodontal disease.

003PAROI5	Periodontics	2 Cr.
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This course trains students in diagnosing and developing treatment plans for patients with periodontal disease.

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

003PATDI5	Dental Pathology	2 Cr.
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By the end of this required course, students will undertake clinical internships to apply the knowledge acquired. They will diagnose and plan treatment for the main pathologies causing dento-maxillofacial pain.

003PCMFS3	Maxillofacial Pathology and Surgery	1 Cr.
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This course addresses maxillofacial surgery, focusing on sinusitis of various origins, dental-related sinusitis, bone reconstruction of the jaws, and the surgical treatment of jaw tumors and fractures. Students will also learn orthognathic surgery techniques, as well as the classification and repair of cleft lip and palate.

003PATOS1	Oral and Surgical Pathology	2 Cr.
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By the end of this required course, students will undertake clinical internships to formulate diagnostic and therapeutic hypotheses.

003PHARS1	Pharmacology	2 Cr.
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Pharmacology is the science of medications aiming to understand their therapeutic action and their side effects. This course introduces the general principles of pharmacology and the main classes of medications, to provide future dentists with the basics of pharmacology and the proper use of medications.

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

Understand the two main bases of pharmacology:

- Pharmacokinetics: the action of the body on the drug
- 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.

003PHYOI1	Physiology 1	2 Cr.
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This required course is taught in the first semester of the first through interactive lectures and tutorials. It is crucial in the educational spiral, particularly for the integration of the major body functions and pharmacology courses. The course aims to develop knowledge on the fundamental principles of maintaining the internal balance of the human body (Homeostasis), and to apply these principles in an integrative reflection.

003PHYSI2	Physiology 2	1 Cr.
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This required course is taught in the first semester of the first through interactive lectures and tutorials. It is crucial in the educational spiral, particularly for the integration of the major body functions and pharmacology courses. The course aims to develop knowledge on the fundamental principles of maintaining the internal balance of the human body (Homeostasis), and to apply these principles in an integrative reflection.

003PHYSI3	Physiology of Systems	3 Cr.
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This required course is taught in the first semester of the second year. It is important in the teaching spiral, particularly for semiology and clinical pharmacology courses. This course aims to develop student's knowledge on the major functions of the organism, grouped by apparatuses and systems, which are essential for understanding the homeostasis of the human body as a whole.

003PHYSI4	Physics	2 Cr.
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This required course allows 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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Students will be able to:

- Apply theoretical knowledge to enhance dental practice.
- Plan and implement a strategic plan to overcome clinical incompetencies.
- Familiarize themselves with the concept of continuous self-learning.

003PRESS3	Case Presentation	2 Cr.
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This course involves an audio-visual presentation of one or more clinical cases managed by students in a clinical setting. Students will establish diagnostic elements, justify their treatment plan choices, and discuss the advantages and disadvantages of the treatments performed, based on current scientific references.

003PCIPS4	Presentation of Inter-Professional Clinical Cases	1 Cr.
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Students will be able to understand and interpret the relationships between systemic diseases and various dental disciplines.

003PROBS4	Oral Probationary, Written and Portfolio	3 Cr.
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This course is designed to assess dental students after 5 years of study. Students will face an examination jury to demonstrate the level of their educational progress before obtaining their final diploma. This assessment consists of 3 main components:

Students will orally present and defend clinical cases they have treated. They must explain their diagnoses, justify their chosen treatment plans, and discuss the outcomes achieved. The jury will ask questions related to students' overall education and specific discipline-related queries.

Students will respond to a set of multiple-choice questions (MCQs) covering the entirety of their education. This written exam verifies their comprehensive understanding of the subjects studied over the 5 years.

Students will submit a portfolio containing evidence of their clinical and academic skills acquired throughout their education. This portfolio includes clinical case reports, evaluations from their supervisors, and personal reflections on their professional development.

003PRMES3	Thesis Project	1 Cr.
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This course equips students with the required research skills to plan and manage a research project.

003PRA15	Removable Prosthodontics	1 Cr.
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This common course enables students to manage complete edentulism from clinical examination to handling emergencies, including rehabilitation with a complete denture.

003PRA1S1	Removable Prosthodontics	2 Cr.
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This course focuses on the design of partial metal removable dentures, including plate tracing, parallel study of plaster models, and pre-prosthetic preparation.

003PRA2I6	Removable Prosthodontics	1 Cr.
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By the end of this course, students should be able to plan the management of clinical challenges in complete dentures.

003PROAI3	Removable Prosthesis	2 Cr.
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By the end of this common course, students should be able to manage partial edentulism, from clinical examination to emergencies, including rehabilitation with an acrylic partial denture.

003PRCFS1	Fixed Prosthodontics	1 Cr.
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By the end of this course, students will be able to evaluate prosthetic parameters and their relationships with other specialties. They will also be able to make a prognosis and explain the causes of bridge failures.

Occlusodontics: By the end of these courses, students will be able to analyze occlusion, use imaging to make a diagnosis, and perform constructive non-invasive medical or occlusal treatments.

003PRFPI5	Plural Fixed Prosthesis	2 Cr.
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By the end of this course, students should be able to recognize the basic principles and therapeutic steps in plural fixed prostheses.

003PRFUI3	Fixed Prosthodontics	1 Cr.
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By the end this course, students should be able to recognize the basic principles of preparations and therapeutic steps in fixed single prosthesis.

003PITPS2	Implant Prosthesis + Lab	2 Cr.
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By the end of this course, students should be able to:

- Establish an implant treatment plan.
- Distinguish between different types of supra-implant prostheses (screw-retained or cemented, metal-acrylic, and metal-ceramic).

- Recognize the role of healing screws.
- Assess the height and thickness of the peri-implant gingiva (concept of emergence profile).
- Choose and screw the impression transfer.
- Perform the impression using the chosen technique (“pick-up” or repositioning).
- Choose and attach the implant analogue to the impression transfer.
- Describe the casting of a positive model with artificial gingiva.
- Select and use screwdrivers suited to the different systems used.
- Describe the different types of abutments, specifying the type of superstructure they allow (screw-retained or cemented).
- Describe the advantages and limitations of different prosthetic abutments to better determine their indications.
- Recognize the importance of radiological control at all stages of construction and fitting.

003PSYMI3	Medical Psychology	1 Cr.
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By the end of this course, students will:

- 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.
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The course explores the basic principles and concepts of oral communication in a variety of speaking formats. It develops student skills in speech content creation and delivery, focusing on language, style, voice, audience analysis, reasoning and communication strategy. The course also explores the effective use of visual aids to enhance speech communication.

003RADII5	Radiology & Radiation Protection	2 Cr.
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Recognize the properties of X-rays and radiation physics. Describe techniques for radiation protection, as well as intraoral and extraoral X-ray methods, including RVG, Scanora, and CT scans for maxillofacial treatments.

003APPRI4	APP Problem Solving	2 Cr.
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Problem-based learning (PBL) is group activity that involves two stages. The first session requires students to read a problem, identify key terms, underline important ideas, list issues to be clarified, organize hypotheses, and formulate learning objectives. This session is followed by individual work. The second session is a feedback session where the learning objectives and hypotheses are verified, followed by a synthesis and evaluation conducted by the instructor.

003APPRI5	APP Problem Solving	1 Cr.
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Problem-based learning (PBL) is an active teaching method that helps students develop practical skills by tackling real or simulated clinical cases. This approach allows students to integrate theoretical knowledge into a practical context and gain experience in patient care. PBL also provides students with the opportunity to practice and enhance their communication skills, both with peers and patients, including asking relevant questions, listening attentively, and explaining complex concepts in an accessible manner.

Each PBL session has two parts:

- An outgoing session where the clinical case is presented in a practical way, as it would occur in a private dental office.
- A return session where students, in groups, identify the different parts of the problem, analyze them, and develop scientific and practical solutions.

003ROCLI6	Clinical Rotation	2 Cr.
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Before beginning to take charge of patients to perform the procedures they have learned theoretically or in practical training, third-year students will assist their fourth-year peers throughout the second semester. This will

facilitate their transition to clinical practice by providing them with hands-on experience, developing their clinical skills, and fostering their integration into the dental care team.

The objectives of this clinical rotation are:

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

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 Semiology	1 Cr.
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This course enables students to identify and describe the signs and symptoms of syndromes and medical pathologies having significant repercussions on public health, in particular certain general diseases that can affect the oral cavity and which dentists may encounter in daily practice.

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

- Identify the clinical manifestations of the most common diseases in outpatient internal medicine.
- Mention the paraclinical tests used
- Identify and control the different cardiovascular risk factors
- Understand the current indications and prescription methods for antibiotic prophylaxis for infective endocarditis
- Analyze the benefit/risk ratio of medications commonly used in oral medicine in subjects at risk (non-steroidal anti-inflammatories, etc.)
- Engage in small projects to develop skills; sense of communication, autonomy, and creativity.

003SENAI2	Anxiety Awareness	1 Cr.
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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 (Arabic Language) 1	1 Cr.
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This required first-year 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 proper acquisition of these skills.

By the end of this course, students will be able to prevent and manage the complications in emergency situations.

003SOIUS4	Emergency Care (in Arabic) 3	1 Cr.
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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 to deal with medical emergencies that may arise following dental care.

003SOIU16	Emergency Care & Practical work (Arabic Language) 2	1 Cr.
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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 needs for preventive modifications of interventions, recognize patients at risk, and manage medical emergencies that may arise following dental care.

003TPADI1	Dental Anatomy Lab 1	2 Cr.
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This required practical work is conducted in the first year and is the application of the courses 003ANDE11 and 003ANDE12. During this practical work, students will reproduce in a block of wax, a typical tooth shape (incisor, canine, premolar and molar). This practical work is based on 2 aspects: drawing and sculpture. The common objective is to deepen the knowledge of the morphology of each category of teeth, develop the sense of observation and master the three-dimensional reproduction of a natural tooth.

003TPADI2	Dental Anatomy Lab 2	2 Cr.
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This required practical work is conducted in the first year and is the application of the courses 003ANDE11 and 003ANDE12. During this practical work, students will reproduce in a block of wax, a typical tooth shape (incisor, canine, premolar and molar). This practical work is based on 2 aspects: drawing and sculpture. The common objective is to deepen the knowledge of the morphology of each category of teeth, develop the sense of observation and master the three-dimensional reproduction of a natural tooth.

003TPAPI6	Pathological Anatomy Lab	1 Cr.
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By the end of this course, students will be able to:

- Understand the role of pathology in the diagnosis and management of diseases.
- Recognize the different techniques of microscopic examination.
- Demonstrate an understanding of essential basic pathological processes.
- Comprehend how clinico-pathological correlation impacts the diagnosis and management of diseases.

003TPBH12	Biology + Histology Lab	1 Cr.
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The general biology practical work introduces students to a certain number of plant and animal cells and organisms; familiarizes them with different instruments or techniques in the laboratory (microscopy, drawing); introduces them to methods of observation and experimentation and teaches them how to write a report.

The practical work in General Biology provides an opportunity for students to confront the theoretical notions received during the course with personal and more experimental experiences of the living world.

Meetings with instructors are held in settings distinct from the amphitheater or tutorial room, fostering deeper discussions and more focused oversight of techniques aligned with specific themes.

003TPCOS2	Community Lab	1 Cr.
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The objective is to train dental students in providing child-friendly oral care while fostering an understanding of community dentistry, preparing them to offer quality care to children and contribute to the oral health of the community.

003TPDDS2	Digital Dentistry Lab	1 Cr.
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This required preclinical practical course is offered in the fourth year of dental medicine. It familiarizes students with various software applications for integration into the daily workflow.

003TPR216	Restorative Dentistry Lab	3 Cr.
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This required preclinical practical course is offered in the 3rd year of dentistry, semester I6. It applies the concepts taught in the EU (003DER115).

003TPDR13	Restorative Dentistry Lab	1 Cr.
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This required preclinical practical course is offered in the 2nd year of dentistry, semester I3. It is the practical application of the course (003DER115).

003TPR15	Restorative Dentistry Lab	2 Cr.
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This required preclinical practical course is offered in the 3rd year of dentistry, semester I5. It applies the concepts taught in the EU (003DER115).

003TPDR14	Restorative Dentistry Lab	1 Cr.
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This required preclinical practical course is offered in the 2nd year of dentistry, semester I4. It is the practical application of the course (003DER115).

003TPDH14	Practical Development & Dental Histology	1 Cr.
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This common required course is offered in the 2nd year and serves as the practical application of the course 003DEH14. It interprets histological sections of certain dental tissues

003TPE15	Hands on Endodontics	2 Cr.
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Preclinical work

003TPE216	Hands on Endodontics	2 Cr.
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Preclinical work

003TPER15	Ergonomics and Infection Control Lab	2 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 Lab	1 Cr.
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The objectives of practical work in occlusodontics, focusing on articulator mounting and the fabrication of muscle relaxation devices such as bite planes and splints, include:

- Understanding occlusal physiology, enabling students to grasp the principles for creating muscle relaxation devices.
- Learning impression techniques.
- Practicing articulator mounting.
- Using the Lucia jig.
- Fabricating bite planes.
- Creating splints.

In summary, these practical sessions aim to familiarize students with the technical skills required for designing, fabricating, and adjusting muscle relaxation devices, while developing their understanding of the fundamental occlusal principles.

003TPOPS1	Pediatric Dentistry Lab	1 Cr.
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By the end of this course, students should be able to take charge of a child and provide all necessary pediatric dental therapeutics.

003TPPA16	Preclinical & Clinical Periodontology	1 Cr.
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This mandatory course, offered in the third year, focuses on periodontal charting and the treatment of simple periodontal disease.

003TPA1I5	Removable Prosthesis Lab	2 Cr.
<p>This required common course, offered in the first semester of the third year, is related to the third-year theoretical course. Students will perform the laboratory steps for the fabrication of a complete denture.</p>		
003TPA2I6	Removable Prosthesis Lab	1 Cr.
<p>This required common practical course, offered in the second semester of the third year, applies the concepts learned in course 003PRA1I5. Students will perform the laboratory steps for the fabrication of a complete denture.</p>		
003TPA2S2	Removable Prosthesis Lab	1 Cr.
<p>This common course enables students to create a complete denture on a phantom model.</p>		
003TPA1S1	Removable Prosthesis Lab 1	1 Cr.
<p>This required practical course, offered in the 1st semester of the 4th year, applies concepts from ECTS 003PRA1S1. It is aimed at performing laboratory steps for fabricating a skeletal partial denture.</p>		
003TPPF15	Fixed Prosthesis 1 Lab	2 Cr.
<p>This required practical course in single fixed prosthodontics, following the theoretical course, is offered in the 3rd year (I5). 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.</p>		
003TPFII6	Fixed Prosthesis 2 Lab	2 Cr.
<p>This required practical course in single 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.</p>		
003TPPF13	Single Fixed Prosthesis Lab	1 Cr.
<p>This required practical course in single fixed prosthodontics, following the theoretical course, is offered in the 2nd year I3. Students will prepare a single tooth on a simulated model for prosthetic rehabilitation.</p>		
003TPPF14	Single Fixed Prosthesis Lab	2 Cr.
<p>This required practical course in single 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.</p>		
003TPPAI3	Acrylic Partial Prosthesis Lab	1 Cr.
<p>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.</p>		
003TPPAI4	Acrylic Partial Prosthesis Lab	1 Cr.
<p>By the end of this course, students should be able to perform the final laboratory steps for the fabrication of a partial denture.</p>		
003TUTOS4	Guidance + Multidisciplinary Clinic	1 Cr.
<p>This course aims to supervise the cases of 4th and 5th-year students under the guidance of an instructor. Its objectives are to ensure the efficient operation of multidisciplinary sessions, monitor students' progress throughout the academic year, and guarantee that patients are properly monitored and treated in a timely manner.</p>		