Hamdan Bin Mohammed College of Dental Medicine





Hamdan Bin Mohammed College of Dental Medicine



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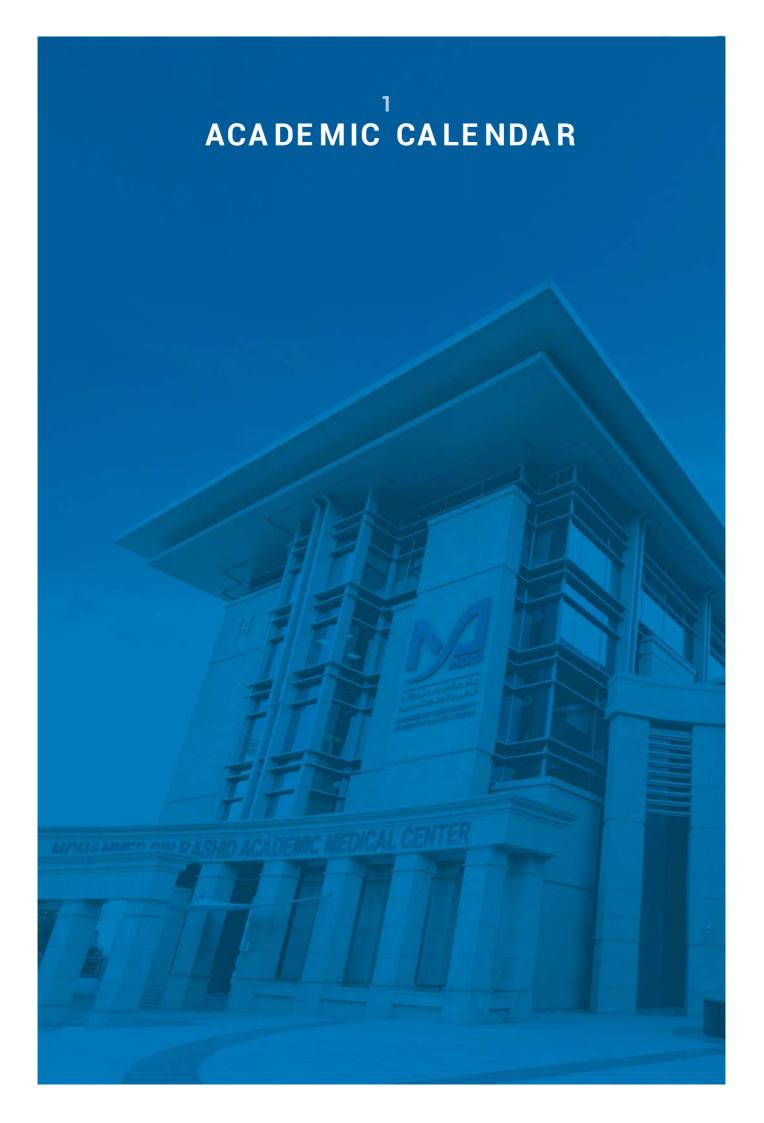
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1. Academic Calendar (2022 - 2023)

The key dates relating to the Calendar for 2022 - 2023 are set out in the table below. MBRU adheres to the academic calendar requirements of the UAE Ministry of Education.

| Semester 1 | Dates |
|--|--|
| Clinic Starts for Returning Students New Student Orientation Classes Start for New & Returning Students Semester 1 Semester 1 - Clinical Practice Semester 1 - Final Exams Semester 1 - SAPC Meeting | August 28, 2022 August 30, 2022 — September 1, 2022 September 04, 2022 August 28, 2022 — February 02, 2023 January 08, 2023 — February 02, 2023 January 09 - 19, 2023 January 24, 2023 |
| WINTER BREAK – 3 weeks | December 18, 2022 - January 05, 2023 |
| Semester 2 | Dates |
| Semester 2 | February 05, 2023 - July 06, 2023 |
| SPRING BREAK – 2 weeks | March 26, 2023 - April 06, 2023 |
| Semester 2 – Clinical Practice Semester 2 – Final Exams Semester 2 – SAPC Meeting Semester 2 – SAPC Graduation Recommendation | June 11, 2023 - July 06, 2023 June 11 - 22, 2023 June 26, 2023 July 4, 2023 |
| SUMMER BREAK Start | July 9, 2023 |

UAE Public Dates & Holidays 2022-2023 (Subject to Official Confirmation)

| Occasion | Dates | |
|----------------------|--|--|
| Islamic New Year | Saturday – July 30, 2022 | |
| Prophets Birthday | Saturday - October 8, 2022 | |
| Martyr's Day | Thursday - December 01, 2022 | |
| UAE National Day | Friday & Saturday - December 02 - 03, 2022 | |
| | | |
| New Year's Day | Sunday - January 01, 2023 | |
| Ramadan Begins | Wednesday – March 22, 2023 | |
| Eid Al Fitr | Friday – April 21 to Monday – April 24, 2023 | |
| Arafat & Eid Al Adha | Wednesday – June 28 to Saturday – July 1, 2023 | |
| Islamic New Year | Tuesday - July 18, 2023 | |

Public holidays are subject to confirmation from relevant authorities and will be announced by the MBRU administration.

Any revisions to teaching and clinical skills scheduling, examination timetables, public holidays, and MBRU closure periods, will be published throughout the year on the university website at www.mbru.ac.ae. In addition, during breaks, the students are required to be on call at Dubai Dental Hospital. Students will be notified of this requirement in advance.





2. Institutional History

His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the United Arab Emirates (UAE) and Ruler of Dubai, announced the establishment of Mohammed Bin Rashid University of Medicine and Health Sciences (MBRU) in 2014. In June 2016, His Highness signed Decree Number 7 for the formal establishment of the university.

The College of Medicine offers undergraduate and postgraduate programs - Bachelor of Medicine Bachelor of Surgery (MBBS), Master of Science in Biomedical Sciences, and PhD in Biomedical Sciences. The Hamdan Bin Mohammed College of Dental Medicine (HBMCDM) offers a range of specialty postgraduate dentistry programs, in Endodontics, Orthodontics, Pediatric Dentistry, Prosthodontics and Periodontics. The College of Nursing and Midwifery offers postgraduate programs - Master of Science in Cardiovascular Nursing and Pediatric Nursing.

MBRU is an inclusive educational institution, comprising diverse faculty and student bodies featuring more than 34 nationalities. Highly experienced faculty and world- class facilities provide medical students with early clinical exposure from year one, and extensive clinical training to postgraduate dentists, in line with the UAE Centennial 2071 to develop education with a focus on advanced technologies.

The University is home to the largest medical simulation center in Dubai, a fully accredited training facility that offers a safe environment for healthcare professionals to learn new procedures and techniques.

MBRU is licensed by the Commission for Academic Accreditation in the Ministry of Education of the United Arab Emirates to award degrees and qualifications in higher education. All programs offered by MBRU are benchmarked against international standards to ensure a high-quality education, which allows its graduates to be competitive globally, both in the job market and in securing advanced specialist training positions.

MBRU is listed on the World Health Organization Directory of Medical Schools. Also is recognized by the Educational Commission for Foreign Medical Graduates (ECFMG).

(https://search.wdoms.org/home/SchoolDetail/F0004132)

2.1. Hamdan Bin Mohammed College of Dental Medicine

After initially being established under the name of the "Dubai College of Dental Medicine" in January 2013, the dental college was later honored with carrying the name of the Crown Prince of Dubai, His Royal Highness Prince Hamdan Bin Mohammed Bin Rashid Al Maktoum. Under the new name, Hamdan Bin Mohammed College of Dental Medicine (HBMCDM), was established to provide internationally recognized postgraduate student-centered dental education programs that combined advanced didactic, clinical, and research training designed to prepare the candidate for a career at the specialist level.

The Commission for Academic Accreditation granted initial accreditation for six programs – Prosthodontics, Oral Surgery, Periodontology, Endodontics, Orthodontics and Pediatric Dentistry.

Currently, HBMCDM offers three-year full-time postgraduate programs in Endodontics, Orthodontics, Pediatric Dentistry, Periodontology and Prosthodontics.





3. Vision, Mission and Goals

Vision

A global hub for innovative and integrated health care education and research at the service of humanity.

Mission

To advance the health in the UAE and the region through an innovative and integrated academic health system, that is nationally responsive and globally connected, serving individuals and communities.

Values

- 1. **Respect:** Respect for other's opinions and differences.
- 2. **Integrity:** Fostering honesty, openness, transparency and accountability.
- 3. **Excellence:** Embracing quality, motivation and creativity in our communications and services.
- 4. **Giving:** Creating a positive and happy relationship with our communities.
- 5. **Connectivity:** Building partnerships with local, regional and international organizations

Goals

- To establish the Emirate of Dubai as a hub for academic specializations in medicine and health sciences
- To contribute to achieving sustainable development through supporting scientific advancement in medicine and health sciences
- To provide the community with qualified medical and healthcare personnel who are able to efficiently address various health issues
- To create a favorable environment for conducting scientific research that enhances the health sector in the community, through supporting education, scientific research, and continued professional development in medicine and health sciences; and
- To achieve a leading position and excellence in medicine and health sciences at the local, regional, and international levels.



HBMCDM Goals and Objectives

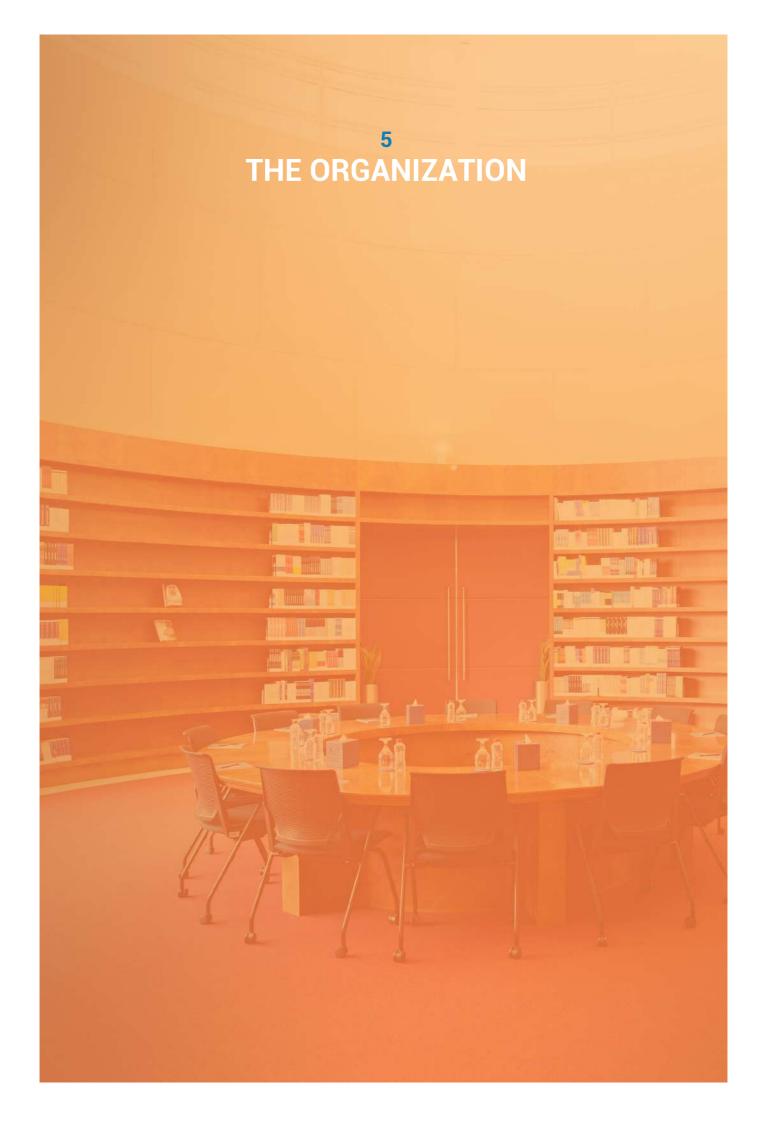
| No. | GOALS | OBJECTIVES | |
|--------|---|--|--|
| GOAL 1 | Provide dental specialty training | Provide competency-based training. Will encourage evidence-based practice. Integrate basic, medical, behavioral and dental sciences in all curricula. Develop new programs/courses. | |
| GOAL 2 | Deliver curricula that meet national and international standards | Affiliate and collaborate with dental educational centers of excellence Include core knowledge across all dental specialties and ensure that all students have the corequisite basic sciences, clinical competency and research skills. Provide dental curricula that will foster an interdisciplinary appreciation by the students. Align academic programs with international curricula for clinical specialist training. Align curricula with the eligibility requirements to sit internationally recognized clinical specialty examinations. | |
| GOAL 3 | Provide patient centered care | Position HBMCDM and DDH as a center of dental excellence. Deliver care through multidisciplinary clinical teams. Empower and involve of patients in their oral health. Monitor patient satisfaction. Ensure that patient complaints are dealt with effectively and efficiently. Provide community programs in oral health education. | |
| GOAL 4 | Embed research to foster evidence- based practice and improve patient care. | Focus on clinical problems relevant to the country and the region. Attract faculty with a research track record. Collaborate with internationally renowned researchers and industry leaders. Support and provide adequate time and resources for research that is aligned with the research mission of the college. Encourage students to conduct research and publish. Strengthen research capacity at the college. | |
| GOAL 5 | Harness technology and innovation in teaching and learning. | Encourage the use of technology by students such as the use of electronic learning management systems. Promote and reward excellence in teaching. Provide academic development education and research. | |



| No. | GOALS | OBJECTIVES | | |
|--------|--|---|--|--|
| GOAL 6 | Develop quality assurance to ensure the goals and objectives are met. | Perform annual reviews of institutional governance, policies and procedures. Performs annual reviews of programs to ensure adherence to their goals and objectives. Conduct regular evaluation of faculty, students, clinical instructors and other relevant staff. Develop an alumni relations committee. Gain feedback from employers on the knowledge and skills of graduates and the need for new programs. | | |

4. Statement of Licensure and Accreditation

MBRU is licensed by the Ministry of Education of the United Arab Emirates, since 2014 to award degrees and qualifications in higher education. Through its Commission for Academic Accreditation (CAA), the Ministry has accredited all MBRU graduate and undergraduate degree programs. MSc in postgraduate programs at HBMCDM has been accredited by CAA since 2013.

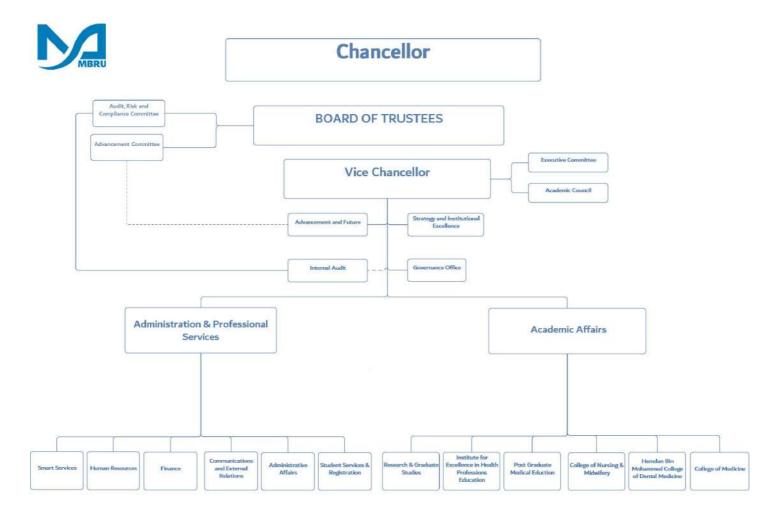




5. The Organization

5.1. MBRU Structure

The structure of the university is shown in the chart below. The University Council is the highest ruling body within MBRU and equates to "The Board" in the Commission for Academic Accreditation Standards.



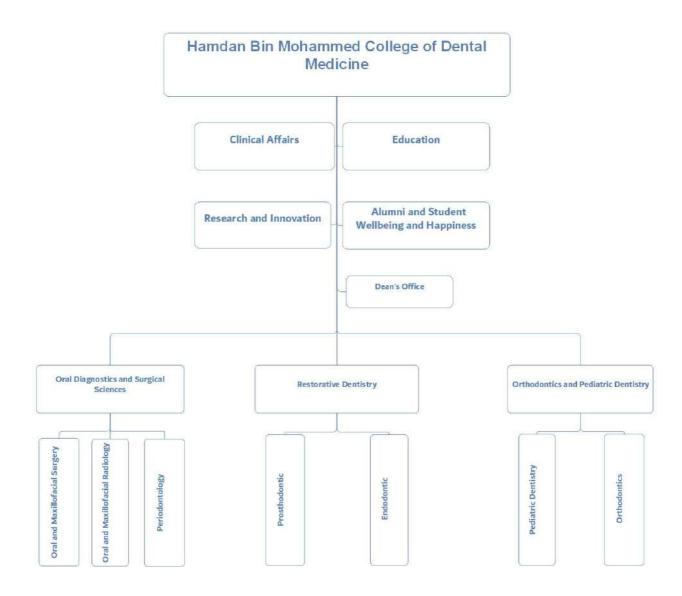


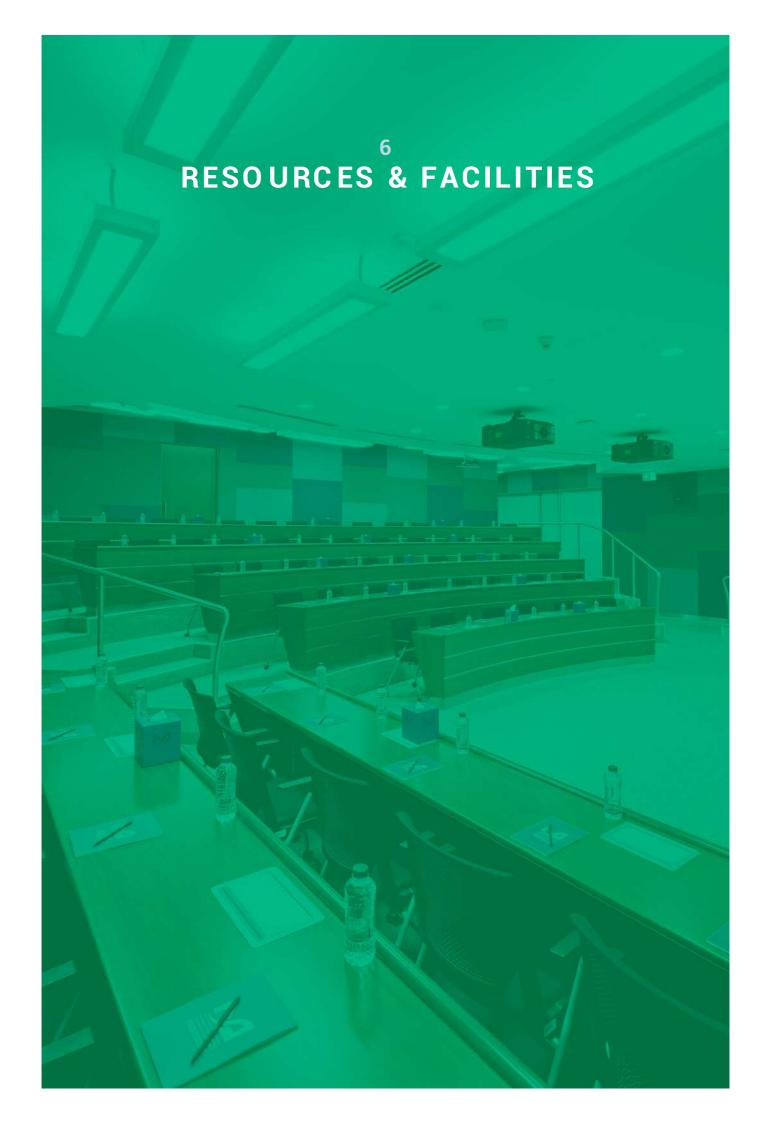
5.2. HBMCDM Structure

HBMCDM is one of the component Colleges of MBRU. The organization chart below provides an overview of its structure:

Hamdan Bin Mohammed College of Dental Medicine

Functional Structure

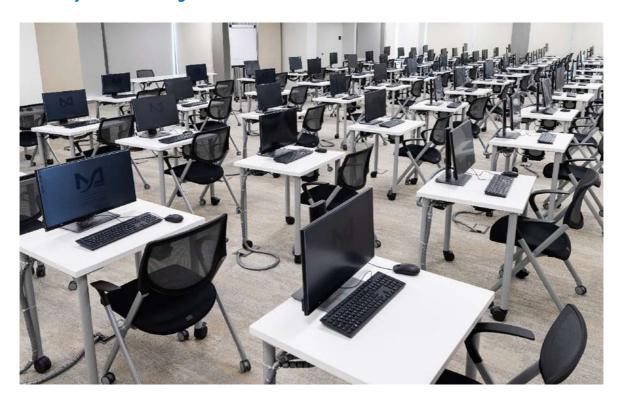






6. Resources and Physical Setting

6.1. Physical Teaching Resources and Facilities



6.1.1 Classrooms

The Mohammed Bin Rashid Academic Medical Center is the home base for MBRU. Currently, it houses a wide range of meeting rooms, lecture halls, and flexible spaces that are able to accommodate up to 100 students depending on the setup of the room. There is also the Ahmed Siddiqui Conference Center which is a state-of-the-art auditorium with fixed theatre-style seating designed to accommodate 337 students. In addition, there are 9 tutorial rooms, each able to accommodate 8-10 students and are ideal for conducting small group learning.

6.1.2 Case Method Halls

MBRU houses two state-of-the-art case method halls, ideal for large classes that can accommodate 80 students.

6.1.3 Teaching Laboratories

MBRU has four teaching laboratories that accommodate in excess of 50 students* at a time:

6.1.3.1 Multidisciplinary Laboratory

This 'wet' teaching laboratory is for practical sessions in subjects that involve wet preparations such as Microbiology and Hematology

6.1.3.2 Physiology Teaching Laboratory

This innovative facility has twelve state-of-the-art workstations with professionally designed lessons and labs dedicated to exploring physiological processes including Electrocardiography, Blood Pressure, Spirometry, and Electromyography.

https://www.adinstruments.com/lt/anatomy?lang=en

6.1.3.3 Computer Laboratory and Examination Hall

There are 70 stations in the computer laboratory, ideal for conducting computer- based classes and examinations.



6.1.3.4 Anatomy Laboratory

MBRU has an Anatomy Lab ideal for teaching Anatomy and related subjects. It has 12 dissecting tables and 1 master table, a morgue, a storage facility, student lockers, and technician offices.

6.2 MBRU Design Lab supported by Wasl

The MBRU Design Lab supported by Wasl is an evolving space at the frontiers of technology and medicine where students are empowered to move around and create their own content for learning rather than just memorizing facts delivered from faculty. The Design Lab hosts lectures and events to pursue and encourage innovation, including health design bootcamps, healthcare innovation seminars and workshops, and undertakes both faculty and student research projects while building communities of practice. The Design Lab' interests notably include: improving the patient experience, increasing medical outcomes, changing lifestyle behaviors, educating innovators, rethinking processes and ultimately connecting patients with physicians.

6.3 Research Laboratories

6.3.1. The MBRU Biomedical Research Center (MBRU-BRC) supported by Al the Jalila Foundation The MBRU-BRC on the 7th floor of the Al Jalila Foundation building has a collaborative area, 3 meeting rooms, 5 faculty offices, and an extensive write-up area with desks and computer terminals to accommodate 60 graduate students*, post-doctoral fellows, and laboratory assistants. Entry to the laboratory section of the 7th floor is regulated by an access control system. The layout includes a large (320 m²) open laboratory fully equipped with state-of-the-art instrumentation and fitted with 10 large island benches which can each accommodate 6 persons*. The facility also has 3 tissue culture laboratories, an equipment room, a chemical store, a service room, a cold room, a tissue bank, a microscopy room, and dedicated laboratories for histopathology, molecular biology and genetics. A basement facility incorporates a space for animal facilities and a general store.

6.3.2. MBRU Research Laboratories

The 4th floor (left wing) of the MBRU building houses a suite of 2 microbiology research laboratories. It also includes a tissue culture suite with 2 rooms, as well as a cold room, chemical and consumable stores.

6.3.3. Center for Outcome and Research in Education (CORE)

CORE provides the environment for educational innovations, knowledge building and translation. CORE provides opportunities for students to engage in educational and health outcomes research.

6.4. Clinical Teaching Facilities

6.4.1 Simulation and Clinical Skills Training Center

The Khalaf Ahmad Al Habtoor Medical Simulation Center (KHMSC) is a training facility located in Building 14 in DHCC where healthcare professionals receive training to improve quality of care and teamwork in a simulated environment with no risk to patients. KHMSC is accredited by the Society of Simulation in Healthcare (SSH) and hosts an American Heart Association (AHA) International Training Center.

The Simulation Center, a 19,500 sq. ft. facility, has all the elements of a virtual hospital. It has two fully functioning operation rooms; four ICU bays - including a pediatric bay; and a wardroom, three debriefing rooms, a small meeting room and a large training room on the second floor. There is a large skills training and competency testing room (e.g. intravenous cannulation, endotracheal intubation, lumbar puncture). In the basement is a complete Emergency Room with facilities for imaging.

The dental simulation center, also known as the dental clinical skills laboratory, has 13 dental units of which one is designated as a teaching unit. Clinical skills are taught by HBMCDM faculty from prosthodontics, endodontics, and pediatric dentistry.



6.4.2. Center for Advanced Surgical Education (CASE)

CASE is accredited by the American College of Surgeons - Accredited Education Institute (ACS-AEI) and provides high standards of education and training for surgical teams. Faculty at CASE deliver surgical education to undergraduate medical students. The Center also offers a Fellowship in Advanced Surgical Education.

6.4.3. Affiliated Healthcare Providers and Clinical Facilities

MBRU has a number of agreements and partnerships with key public and private healthcare providers in Dubai and the UAE to collaborate in areas of medical education, research and service provision. Through such collaborations, MBRU aims to advance health in the region through an innovative and integrated academic health system. Specialized training programs and partnerships enable to strengthen the journey of medical students and healthcare professionals by providing them with opportunities starting from undergraduate education to specialization and continuing education.

6.4.4 Dubai Dental Hospital

Dubai Dental Hospital (DDH) launched in 2008, is the largest specialized dental clinic in Dubai with 63 dental chairs.

Located in Dubai Healthcare City (DHCC), DDH provides the highest standards of dental care for the community and serves as a secondary referral center for complex dental cases and oral mucosal disease.

In 2012, Dubai Dental Hospital became the clinical partner of Hamdan Bin Mohammed College of Dental Medicine and offers a wide range of specialized services including general dentistry, pediatric dentistry, cosmetic dentistry, orthodontics, and periodontal treatment.

The clinic has a state-of-the-art facility, located in building 34, DHCC and occupies the ground and the first floor. With eight specialty dental departments, 63 dental chairs equipped with modern technology tools and microscopes for the Endodontic clinics, advanced dental laboratory, and an in-house imaging department, the Dubai Dental Hospital offers integrated dental services under one roof.

Dubai Dental Hospital achieved Joint Commission International's Gold Seal of Approval® for Ambulatory Care Accreditation by demonstrating continuous compliance with its internationally recognized standards in 2018.

6.5. Library Resources

The Al Maktoum Medical Library (AMML) supports MBRU's students, medical and academic as well as the wider medical community, by providing access to quality and authoritative information resources in the field of medicine and research. Located on the first and second floor of MBRU, the state-of-the-art library offers a collection of point of care resources and medical education databases and provides spaces for quiet study as well as group and collaborative study for members. In addition, its facilities include a reading room, study lounges and pods, meeting rooms and an Information Commons.





| Library Operating hours | | | |
|----------------------------|-------------------|--|--|
| Monday - Thursday | 8:00 am – 9:30 pm | | |
| Friday | 8:00 am – 4:00 pm | | |
| Saturday | 8:00 am – 4:00 pm | | |
| Sunday and Public Holidays | Closed | | |

The Library is a modern 30,000 square feet facility. AMML maintains over 3000 print books, more than 250 print journals and subscription to a range of electronic resources including e-Journals and eBooks covering a wide range of medicine and allied health topics, bringing a wealth of up-to-date and reliable information to users. The Library also has multiple copies of course core textbooks to support the curriculum at MBRU. Library electronic resources can be accessed remotely using the student's university email ID and password. Library resources include: More than 30 databases covering 11,000 electronic journals, and more than 10,000 electronic books. The Library has developed an extensive network for sharing educational resources and journals with other libraries in the region. New students will receive an induction into using the library and its online services as part of orientation, and librarians are available throughout the academic year to help students locate and use the materials and facilities they require. The regulations for use of the Library facilities are available in the Student Handbook. Library services include reference and information services, information literacy sessions, research support, interlibrary loans and document delivery, remote access, technology hub and wellness services.

6.6. Educational Technology

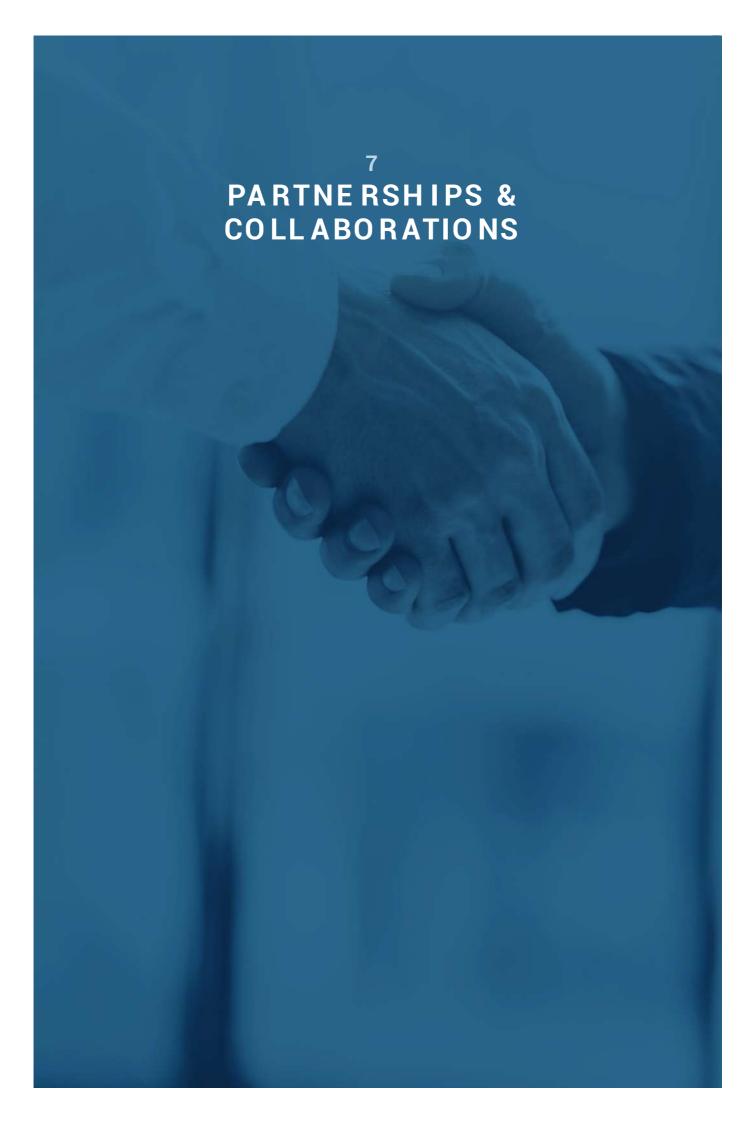
- **6.6.1.** Registration and enrollment: All students management records will be on an electronic platform called 'PowerCampus'.
- **6.6.2.** Learning Management Systems
 - **6.6.2.1**. E-Learning Management System (LMS): The University has subscribed to 'Desire2Learn' as the platform for the LMS.
 - **6.6.2.2.** ExamSoft platform is used for conducting electronic examinations, archiving question banks and analyzing results.
 - **6.6.2.3.** Office 365 tools such as Microsoft Teams are used for synchronous delivery of teaching and learning.



6.6.3. Specialized software

- **6.6.3.1.** PathXL software provides virtual microscopic teaching in histology, anatomic pathology and hematology.
- **6.6.3.2.** LAMS a web-based software that supports in class, blended and online student-centered activities.







7. Partnerships and Collaborations

MBRU has a number of collaborative agreements and partnerships with educational, research and service institutions both within and outside the UAE. Such partnerships aim at enhancing the quality of MBRU's educational programs, widening the University network and expanding the university outreach.

Through such collaborations, the University's mission is to advance health in the region through an innovative and integrated academic health system. Specialized training programs and partnerships enable to strengthen the journey of medical students and healthcare professionals by providing them with opportunities starting from undergraduate education to specialization and continuing education.

Our current list of partners include:

| Al Jalila Children's Hospital | Kuwait Institute for Medical Specialization | |
|--|---|--|
| Al Jalila Foundation | Mayo Clinic | |
| American Heart Association | Mayo Clinic College of Medicine and Science | |
| Association of American Medical Colleges | Ministry of Community Development | |
| Bio Fire | Ministry of Foreign Affairs and International Corporation | |
| Cardiff University | Ministry of Health and Prevention (MOHAP) | |
| Center Hospital Princess Grace Hospital | Ministry of Presidential Affairs – Scholarships Office | |
| Cleveland Clinic Abu Dhabi | Mohammed Bin Rashid Space Centre (MBRSC) | |
| DP World | Moorfields Eye Hospital – Dubai | |
| Dubai Corporation for Ambulance Services | RCSI Bahrain | |
| Dubai Dental Hospital | Royal College International - Canada | |
| Dubai Government Human Resources Department | Royal College of Surgeons - Ireland (RCSI) | |
| Dubai Health Authority | SEHA | |
| Dubai Institute of Design and Innovation LLC | Seoul National University | |
| Dubai Police | The Royal Australasian College of Dental Surgeons | |
| Dubai Science Park (DSP) | The Royal College of Pathologists | |
| Emirates Health Services - Organ Transplant | The Sheikh Hamdan Bin Rashid Award for Medical Sciences | |
| Fakeeh University Hospital - Dubai | UAE Red Crescent | |
| Princess Grace Hospital | Unilabs Middle East LLC | |
| King Saud University | United Eastern Medical Services (UE Medical) | |





Queen's University Belfast

MBRU has an academic partnership with Queen's University Belfast (QUB) in the United Kingdom. QUB was founded as Queen's College in 1845, before becoming a university on its own right in 1908 and is the ninth oldest university in the United Kingdom and is a member of the UK's Russell Group of leading research-intensive universities.

The goal of the partnership is to provide quality assurance through offering advice on strategic planning, organization and governance of the university and its colleges, as well as infrastructure and educational resources development, development of curriculum, faculty recruitment, senior staff recruitment, student recruitment and faculty development programs.



Mediclinic Middle East

Mediclinic Middle East is part of Mediclinic International, one of the top ten listed private healthcare groups in the world. Mediclinic operates 74 hospitals and 30 clinics across four countries, including 51 hospitals in South Africa and Namibia, 17 hospitals in Switzerland (under the name Hirslanden) and seven hospitals with over 900 inpatient beds, as well as more than 20 clinics in Dubai, Abu Dhabi, Al Ain and Al Dhafra, UAE.

MBRU has an academic affiliation agreement with Mediclinic Middle East to advance mutual passion for medical education. Under this agreement, students will be able to train at the Mediclinic Middle East's excellent healthcare facilities by their highly trained specialist physicians. Mediclinic Middle East has assigned trained adjunct faculty members as supervisors for students who are embedded in healthcare teams and participate in healthcare delivery under supervision with graded responsibilities according to skills and experience. The training is based on a jointly developed program with clearly defined learning outcomes.

Under this partnership, the clinical academic faculty at MBRU will be granted clinical privileges to treat patients at Mediclinic facilities. Mediclinic Middle East offers students the opportunity to learn in the setting of a large multispecialty private sector healthcare provider.



Dubai Health Authority

The Dubai Health Authority (DHA) is the major public sector, government healthcare provider in Dubai. The healthcare system includes four hospitals and thirteen Primary Healthcare Centers supported by a full range of ancillary services. Service is provided in all the core specialties and subspecialties.

MBRU and DHA have an affiliation agreement to provide students with clinical experiences building on a Memorandum of Understanding signed between the two organizations.





Al Jalila Children's Specialty Hospital

Al Jalila Children's is the first dedicated children's hospital in the United Arab Emirates. The state-of-the-art medical facility was created under the directives of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE, and Ruler of Dubai, to affirm his belief that all children should have an equal opportunity for success in life, and the treatment of children suffering from illness or disease should not be subject to geographical chance. The vision of His Highness is to have Al Jalila Children's among the top 10 pediatric hospitals in the world. Al Jalila Children's is an ultramodern hospital that aims to be the driving force behind tertiary and quaternary care in the region. The hospital's highly qualified medical and clinical experts who are setting new standards for healthcare excellence on a local and regional level. Al Jalila Children's comprises 200 beds in a child and family friendly environment.

MBRU has an academic affiliation agreement with Al Jalila Children's Specialty Hospital to advance mutual passion for medical education. Under this agreement, Al Jalila Children's excellent healthcare facilities and highly trained specialist physicians are available to train MBRU's students.

The Al Jalila Children's Specialty Hospital's Pediatric Residency Program and the Al Jalila Children's Child and Adolescent Psychiatry Fellowship Program were created in conjunction with MBRU.



Dubai Dental Hospital

The Dubai Dental Hospital (DDH) provides a comprehensive range of specialized dental care services, all under one roof in a new, fully equipped facility in line with the highest standards of evidence-based dental care.

Dubai Dental Hospital is MBRU's clinical partner and provides clinical training for postgraduate dental students at the Hamdan Bin Mohammed College of Dental Medicine (HBMCDM).



Moorfields Eye Hospital - Dubai

Moorfields Eye Hospital – Dubai is the first overseas branch of Moorfields London, the oldest eye hospital in the world. Its world-class facilities and very experienced eye care consultants and specialists ensure that Moorfields Dubai provides the highest and exceptional quality standards of diagnosis and treatment of eye diseases as Moorfields London, while setting the highest benchmark for eye care in the Middle East.

MBRU has a service agreement with Moorfields Eye Hospital – Dubai to collaborate and provide educational activities related to ophthalmology as part of the core curriculum for the students of MBRU.





Saudi Commission for Health Specialties

The Saudi Commission for Health Specialties (SCFHS) is an independent scientific professional body, established in 1992, with the goal of being a healthy society through qualified health practitioners. They are tasked with the training health care professionals by supervising the scientific and professional training programs represented in the Saudi Specialty Certificate and Diplomas. SCFHS is responsible for supervising and evaluating training programs, as well as setting controls and standards for the practice of health professions. SCFHS develops, approves and supervises professional health-related and medical education programs, and supervises and approves results of specialized examinations.

In 2018, MBRU signed an agreement with SCFHS to collaborate on postgraduate medical education. In 2020, MBRU received a four-year Institutional Accreditation from SCFHS after meeting all the institutional accreditation standards. This accreditation affirms that MBRU provides all the required educational and clinical resources for the postgraduate professional healthcare programs supervised by SCFHS

MBRU has established research collaborations for funding laboratory and non-laboratory research projects to support outstanding research proposals in health, medical and biomedical sciences through competitive peer-evaluation processes. The University expects to expand further to identify new and continued collaborations with public and private partners in the field, nationally, regionally and internationally. These collaborations include joint research projects, sponsored research, consultation and expert assistance, participation at leading conferences and seminars, applicable to students and faculty. Of all research publications to date, more than 80% are in collaboration with international entities.

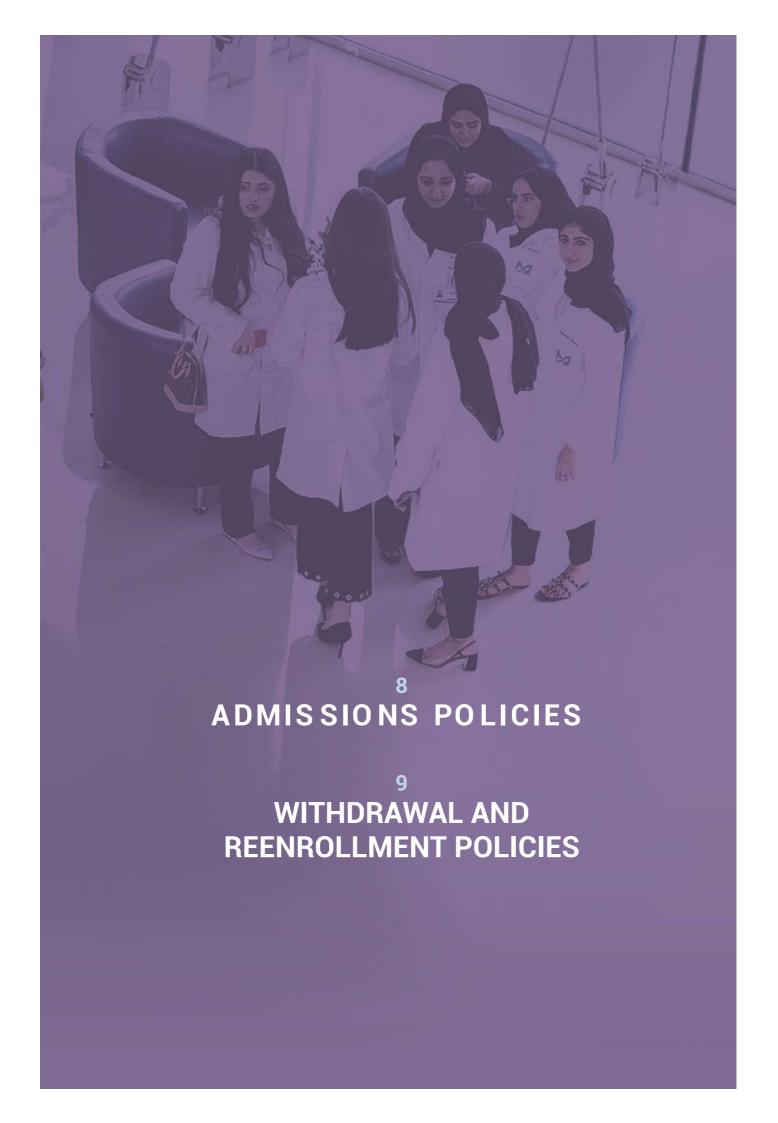
Research is supported through both internal and external grants and many MBRU researchers have been successful in securing awards from various funding bodies and industry.

MBRU faculty members serve on multiple national entities devoted to high-quality research such as the Mohammed bin Rashid Academy of Scientists, and Emirates Scientists Council.

7.1. Associations with International Institutions

HBMCDM has Memoranda of Understanding (MoU) or associations with the Royal College of Surgeons in Ireland (RSCI), Royal College of Surgeons of Edinburgh (RCSEd), Saudi Commission for Health Specialties, Kuwait Institute of Medical Specialization Specialization and Royal Australasian College of Dental Surgeons (RACDS). All MOUs are maintained, regularly reviewed and evaluated by the Communication Department.

The postgraduate programs at HBMCDM satisfy the eligibility criteria to sit the Royal College of Surgeons of Edinburgh (RCSEd) and Ireland (RCSI) specialty membership examinations. Students who pass the Periodontology Program are deemed to have an equivalent standing to be eligible for RACDS Membership (Specialist Dental Practice) in Periodontics subject to attaining Specialist Registration in the UAE.





8. Admissions Policy

8.1. General Admission Requirements and Procedures

The minimum requirement for admission to the HBMCDM postgraduate programs are:

- Degree in Dentistry (B.D.S., D.D.S., D.M.D.) with a minimum cGPA of 2.50 on a scale of 4.00 OR Average of 75%. Applicants with cGPA between 2.00 - 2.49 OR Average of 70 - 74.99% may be considered.
- A TOEFL score (iBT) 80 with minimum of 20 in Writing; or IETLS with an overall band 6 with no skill less than 5.5.
 - Candidates who are native English speakers by passport and studied their qualifying undergraduate degree in a university where the medium of instruction is English may be exempted from the English proficiency requirement into the Master programs. The Admissions Committee may authorize the interviewing panel or other internal mechanisms to determine the decision of exemption.
- Minimum of one year Internship or of any other clinical practice.
- Multi-Mini Interviews (MMIs) are conducted as part of the selection process at HBMCDM (see *Student Handbook*). Endodontics and Prosthodontics applicants may also have a practical exercise in the dental simulation center.
- Achievements on the application forms are also considered in the selection process e.g.
 College grades, class rank, extra-curricular activities and recommendations from teachers,
 Dean and Head of Department play an important part in the whole admission procedure.
- All applicants are reviewed according to these criteria without discrimination based on race, age, color, ethnic origins, marital status, gender or any other non-merit factor.
- Applications can be submitted online through the MBRU website www.mbruniversity.ac.ae
- MBRU's admissions policy and procedures is detailed in the Student Handbook.

8.2. Transfer of credits

A transfer admission request shall be considered if the student is in good academic standing at his/her home institution and should not hold a cGPA of less than 3.0 on a scale of 4 (or equivalent) in the last completed year. Transfer credits may be granted, if relevant to the program, be from an institution with comparable learning outcomes to MBRU, and relate to a minimum earned grade of B. Please refer to *Student Handbook* for detailed information.

9. Withdrawal and Reenrollment Policies

A student may withdraw for medical, military, personal/academic or other reasons. Withdrawal applies to a course, a number of courses or the whole academic year. A student who misses two consecutive weeks of required class work of a particular course without a valid excuse, may be withdrawn from the registered courses he/she missed. Detailed information is provided in the Withdrawal Policy in *Student Handbook*.

Students who were given a leave of absence from the university, or break from continuous enrolment in regular academic terms, may apply for reenrollment, contingent upon the following:

- The student applies for reenrollment within two years from the beginning of the first academic term of the break in registration
- The university has not dismissed the student.
- Students on suspension may apply for reenrollment following completion of the period of Suspension





10. Financial Policies

10.1. Financial Administration

Student Services and Registration (SSR) in collaboration with the Finance Department and Advancement and Future Office supports students with completion of financial status and can advise on issues relating to tuition fees and scholarships. For details, please refer to the Student Handbook.

10.2. Tuition Fees

10.1.1 MBRU will annually share and publish in the Student Handbook, College Catalog and MBRU Website a "Schedule of Tuition Fee" for all University approved programs. The tuition fee excludes nonrefundable AED 1050/- application fee paid at the time of submitting the application form and the required documents. The nonrefundable seat-reservation fee counts towards the fees of the first semester

Any changes in tuition fees are approved by the Academic Council and communicated to students at least six months before taking effect.

Below is the tuition fees and schedule for Academic Year 2022-2023:

HBMCDM Schedule of Fee for Academic Year 2022 - 2023 is set out below:

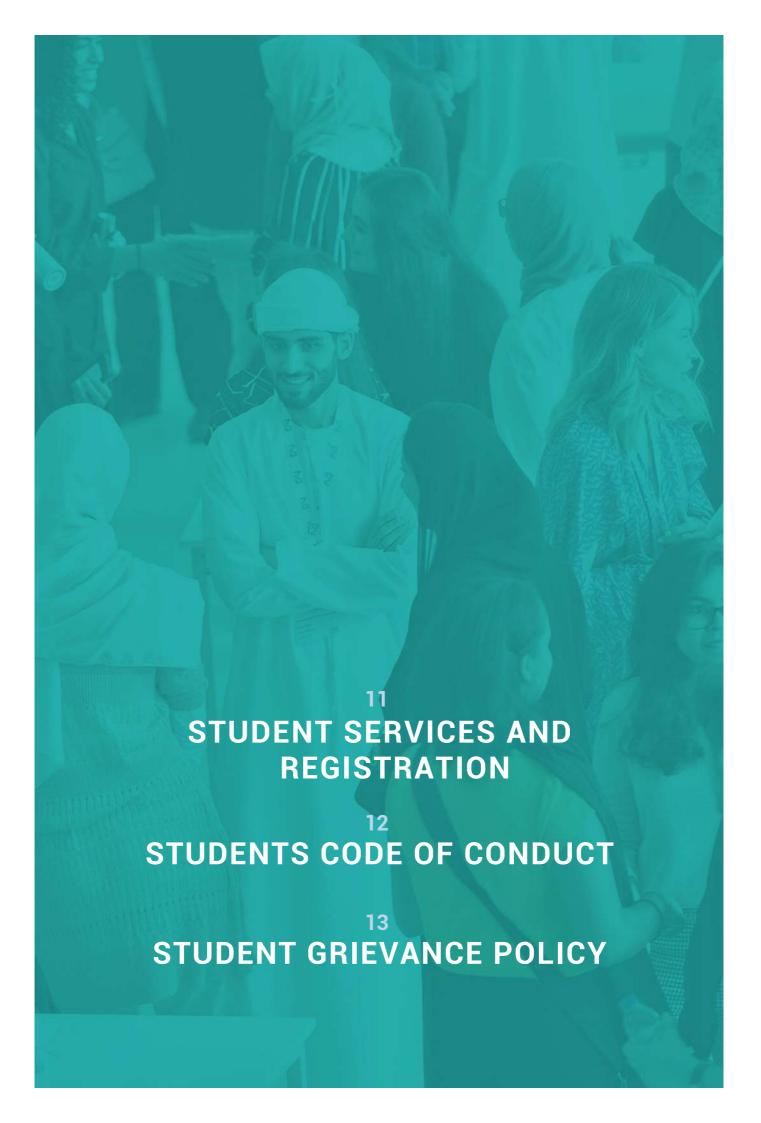
| 2022 - 2023 | International Student | UAE & GCC* Student | Payment Schedule |
|---|--------------------------|-----------------------|------------------------------------|
| Seat reservation fee (non- refundable) | AED 10,000 | AED 10,000 | At the time of acceptance of offer |
| Tuition Fee | AED 175,000 | AED 150,000 | July 26 th , 2022 |
| Total annual tuition fee | AED 185,000 | AED 160,000 | |

^{*}GCC: Gulf Cooperation Council

10.3. HBMCDM Dissertation Refund:

A total fund of AED 15,000/ has been allocated to support MSc dissertation research of a student at HBMCDM with below scope to consider:

- The total fund allocated is throughout the duration of the program. The fund is provided for a limited range of research related activity such as purchase of certain consumables or items of equipment not otherwise available, as well as journal publication costs. It is imperative that students and faculty supervising dissertations keep a record of expenditure as re-imbursement will not be made without receipts being provided.
- Publication fees will be fully covered from the allocated MSc dissertation research fund for
 publication in Q1 and Q2 journals and up to 50% in other journals. The principal supervisor or
 the student can claim the publication fee up to one year after the MSc degree is awarded.
- For the presentation of MSc dissertation research outcomes at conferences, the student/alumnus can claim the cost up to six months after MSc degree is awarded. The alumnus will need to submit a written declaration that the material to be presented derives wholly from the MSc dissertation, no other entity could support their registration fee, travel and accommodation costs and the declared affiliation at the conference is HBMCDM, MBRU.
- Approvals for research funding should be in writing, and any purchases will be the property of MBRU after the completion of the research or the degree being awarded, whichever is earlier.





11. Student Services & Registration

The Department of Student Services and Registration (SSR) provides assistance to students in fields of admissions, scheduling, registration, student records, graduation, counseling, accommodation, student events, activities, sports and recreation, career development and student support services,

SSR is a home for all students of MBRU, a place where you can receive support for all your needs, interests and development. For more details, please check the *Student Handbook*.

12. Student Code of Conduct, Professional Behavior and Fitness to Practice

Students of MBRU are expected to demonstrate the highest standard of professional and social behavior, they are required to respect the ethos of UAE society and to ensure behavior that does not offend cultural sensitivities. The *Student Handbook* sets out details on what students can expect from MBRU and DDH during their time of study, and what their responsibilities are, including general conduct, dress code policy, co-education conduct and classroom etiquette on campus or online.

Dental students (in specialty training) enjoy special privileges, which come with responsibilities and expectations by the society. Because of this, they need to be aware of the higher standards of professional behavior. HBMCDM will ensure that students are aware of this relationship with the society and provide them with opportunities to learn and practice the expected standards of professional behavior.

This guidance considers dental students' fitness to practice in relation to their behavior and in relation to their health when appropriate. Poor health can affect a student's fitness to practice either directly or by being a cause of misconduct.

12.1. Expectations for appropriate 'Fitness to practice'

12.1.1. Displaying professional conduct

Dental students should acquire and demonstrate the types of behavior that mark them as fit to practice as specialists by:

- Maintaining the standards of competence and care that will not put patients and the public at risk
- Striving for high ethical standards in their professional and personal lives

12.1.2. Providing good clinical care

- Being able to provide good clinical care is fundamental to becoming a specialist dentist. This
 objective should guide a student's behavior in both their clinical and academic work. They
 should reflect on how they can support and promote good clinical care as part of their
 education.
- In order to demonstrate that they are fit to practice, students should:
 - Recognize and work within the limits of their competence and ask for help when necessary.
 - Accurately represent their position or abilities.
 - Make sure they have the necessary supervision for the clinical task they perform.
 - Respect the decisions and rights of patients.
 - Be aware that treatment should be based on clinical need and the effectiveness of treatment options, and that decisions should be arrived at through assessment and discussion with the patient.
 - Not discriminate against patients by allowing their personal views to affect their professional relationship or the treatment they provide or arrange (this includes their views about a patient's age, color, culture, disability, ethnic or national origin, gender, lifestyle,



marital or parental status, race, religion or beliefs, sex, sexual orientation, or social or economic status).

- Behave with courtesy.
- Report any concerns they have about patient safety to the appropriate person.

12.1.3. Maintaining good clinical practice

- Students must be aware of their responsibility to maintain their knowledge and skills throughout their careers.
- Students are expected to keep up to date and to apply the knowledge necessary for good clinical care. They should understand that as a clinician they will have to participate in audit, assessments and performance reviews throughout their careers as part of re-licensing.
- In order to demonstrate that they are fit to practice, students should:
 - Reflect regularly on standards of medical practice in accordance with locally agreed and adopted guidance by MBRU, DDH and local authority.
 - Attend required learning sessions.
 - Complete and submit course work on time.
 - Be responsible for their own learning.
 - Reflect on feedback about their performance and achievements and respond constructively.
 - Be familiar with guidelines of local healthcare providers.
 - Respect the knowledge and skills of those involved in their education.
 - Make sure they can be contacted and always respond to calls in relation to care of patients or their own education.

12.1.4. Building ethical and respectful relationships with patients

- Students will have extensive contact with patients during their program and must build relationships with patients based on openness, trust and good communication.
- Students should maintain a professional boundary between themselves and their patients. They must not use their professional position to cause distress or to exploit patients.
- Students should obtain patient consent for any treatment or research.
- Patients have the right to expect information about them to be held in confidence. A patient's
 case must not be discussed in a way that would identify them with anyone not directly involved
 in their care, or in a public place. Academic work that contains specific information about a
 patient must not identify the patient if it is to be seen outside the patient's care team. This
 includes case or log reports that are submitted as part of the student's course work or
 assessment.
- In order to demonstrate that they are fit to practice, students should:
 - Respect patients and treat them with dignity.
 - Be aware of ethical issues in their professional behavior with patients.
 - Be open and honest when dealing with patients, their carers, relatives, or anyone else close to them.
 - Make sure that patients have consented to a dentist in specialty training being (MSc student) involved in their care.
 - Make sure they are clearly identified as dentists in specialty training.
 - Dress in an appropriate and professional way and be aware that patients will respond to their appearance, presentation and hygiene.
 - Make sure they follow the hospital adopted guidance on consent and confidentiality.

12.1.5. Working collaboratively with colleagues

- Students need to be able to work effectively with colleagues inside and outside of healthcare facilities in order to deliver a high standard of care and to ensure patient safety.
- Students must develop skills to work in multi- disciplinary teams. This involves respecting the skills and contributions of colleagues and other professionals, and developing effective communication with other members of the team and with patients.



- It is also important that students protect patients from harm posed by another colleague's behavior, performance or health. They should take steps to raise any concerns with the appropriate person.
- In order to demonstrate that they are fit to practice, students should:
 - Demonstrate skills that allow them to deal with uncertainty and change in the workplace.
 - Be able to work effectively in a team and to take on different roles as appropriate, including taking responsibility for tasks.
 - Develop and demonstrate teamwork and leadership skills.
 - Be aware of the roles and responsibilities of other people involved in delivering oral healthcare.
 - Respect the skills and contributions of colleagues and other professionals and not discriminate against them.
 - Raise concerns about overall practice in a healthcare setting or about colleagues, including other students, practitioners and other healthcare workers, with the appropriate person if patients are at risk.

12.1.6 Demonstrating ethical behavior

- Good clinical practice requires students to make sure that their behavior at all times justifies the trust that patients and the public place in the dental profession.
- In order to demonstrate that they are fit to practice, students should:
 - Bring attention to any concerns about, or errors in, their clinical work.
 - Be honest, genuine and original in their academic work, including when conducting research, and take effective action if they have concerns about the honesty of others.
 - Be honest and trustworthy when writing reports and logbooks, and when completing and signing forms.
 - Be honest in citing their qualifications and not misrepresent their qualifications, position or abilities
 - Not plagiarize others' work or use their own work repeatedly in a way that could mislead.
 - Be honest and trustworthy in any financial dealings, and make sure that any funds are used for the purpose they were intended for.
 - Co-operate with any formal inquiry by the University or Hospital or organization into their health, behavior or performance, or that of anybody else.
 - Comply with the laws of the UAE and, where relevant, any laws that apply specifically to an individual Emirate.
 - Comply with the regulations of the University, Hospital or other health organization.

12.1.7 Understanding risks associated with their own health

- It is important that students are aware that their own poor health may put patients and colleagues at risk.
- Good medical practice requires dentists to seek and follow advice from a suitably qualified
 professional about their health. This is particularly important if they have, or suspect they have,
 a serious condition that could be passed on to patients, or if they are receiving treatment that
 could affect their judgement or performance.
- In order to demonstrate that they are fit to practice, students should:
 - Be aware that their own health problems may put patients and colleagues at risk.
 - Seek medical or occupational health advice, or both, if there is a concern about their health, including mental health.
 - Accept that they may not be able to accurately assess their own health and be willing to be referred for treatment and to engage in any recommended treatment programs.
 - Protect patients, colleagues and themselves by being immunized against common serious communicable diseases if vaccines are available and are recommended by the relevant health authority.



- Not rely on their own or another student's assessment of the risk posed to patients by their health, and should seek advice, when necessary, from a qualified clinician or other qualified healthcare professional.
- Be aware that when they graduate, they are responsible for informing their employer or other appropriate person if their health poses a risk to patients or the public.

12.1.8 Demonstrate appropriate social behavior

- Students are viewed as representatives of the university and should not allow their actions to reflect negatively upon the university or upon their profession. In order to demonstrate fitness to practice, the student is expected to:
 - Recognize the right of all individuals to be treated with respect without regard to race, age, gender, disability, national origin, position, or religion.
 - Avoid physical, verbal or written physical or sexual harassment.
 - Avoid obstruction of due process through lying, using pressure, threat, abuse, or similar practices against any person, or withholding of pertinent information.

12.1.9. Consequences of breaching the fitness to practice

If there are grounds for concern as to the fitness of the student for practice and upon investigation the student was found to be in breach of the fitness to practice code, the Dean convenes an ad hoc Fitness to Practice Committee that may recommend any of the following:

- Continue his or her studies without limitation.
- Continue his or her studies under specified limitations and conditions.
- Be prohibited from entering specified clinical facilities.
- Suspension from studies.
- Dismissal from University.
- Informing law enforcement agencies.
- Informing concerned professional licensing bodies.
- Other penalties or corrective actions as deemed appropriate and necessary by the fitness to practice committee.

12.2 Policies and procedures for dealing with suspected breaches of fitness to practice

12.2.1 Committee for Fitness to Practice

A Committee will be involved in the handling of the rare cases of report or evidence of infraction of this code to the extent that raises concern about the fitness of the student to practice. The committee mandate includes:

- Initiate the process for dealing with a report of infringement of code of conduct on instruction from the Dean.
- Investigate the allegation(s).
- Adjudicate on the basis of the investigation.

12.2.2 Membership

- Associate Dean Clinical Affairs
- Four faculty members.
- A representative from Student Services
- The Dean appoints the Chairperson from among the members.
- The Committee shall meet whenever the need arises.

12.3 Procedure for handling an allegation of a breach to fitness to practice by a dental student

The handling of an allegation of misconduct must be confidential, expeditious and strictly in accordance with laid down process.



12.3.1 Committee proceedings

- A report of allegation of potential infarction of the code of conduct shall be directed to the Dean, who will evaluate and share with the Chairperson of the Committee on fitness to practice, if he/she considers that there are enough grounds to proceed.
- Anonymous allegations shall not normally be considered. If the nature of the allegation makes anonymity of the reporter expedient, the name and identification of the author will be removed from any written document but be known to the Dean.
- Within one week of receiving a complaint, the Committee shall review the allegations and initiate investigation into the allegations and associated circumstances. The investigation may proceed in the student's absence, if the student fails to attend the meeting(s) without reasonable explanation.
- The Committee or the student may invite anyone who may have information relevant to the case to attend meetings to give evidence in writing or in person.
- The meetings shall be held in private, and all proceedings shall be confidential.
- The Chairperson of Committee shall communicate the decision of the Committee in writing to the student and the Dean.
- Possible outcome of the investigation:
 - The student is fit for practice and recommend that he/she may continue on the program with no conditions.
 - There are grounds for concern as to the fitness of the student for practice but he or she may continue his or her course of study under specified conditions.
 - The student is unfit for practice with recommendations that may include:
 - Suspension from studies.
 - Dismissal from University.
 - Informing law enforcement agencies.
 - Informing concerned professional licensing bodies.
- The student may appeal to the Dean if dissatisfied with the decision of the Committee.

12.3.2. Appeal

- A student shall have the right of appeal against a decision of the Committee.
- The appeal shall be submitted in writing within five working days of the notification of the result of the decision to the Dean stating the grounds of appeal.
- The Dean will raise an ad hoc Dispute Resolution Committee to consider the appeal.
- During the consideration of the appeal, the decision of the Fitness to Practice Committee shall remain in force.
- An appeal hearing shall be arranged within one week of receiving the appeal in accordance with the following procedure:
 - The student may choose to be accompanied by a nominated 'friend' from the MBRU community (for example, a student representative).
 - The meeting shall be held in private.
 - The case by the Committee on Fitness to Practice shall be presented by its Chairperson, or nominee.
 - The student shall state his grounds for appeal and then his defense.
 - The Committee on Fitness to Practice shall respond.
 - The student shall be given the opportunity to react to the response of the Committee on Fitness to Practice.
 - The Chairperson of ad hoc Dispute Resolution Committee shall summarize proceedings.
 - The Chairperson of ad hoc Dispute Resolution Committee shall pronounce the Committee's decision at the same or another sitting.
 - The ad hoc Dispute Resolution Committee may confirm, amend, or refer the decision back to the Committee on Fitness to Practice.
 - The Chairperson of the ad hoc Dispute Resolution Committee shall inform the Dean of the decision and the reasons for the decision within seven working days.



- If, at any stage, it becomes apparent or it is suspected that the student's alleged problems
 are caused by ill health or disability, these procedures shall be suspended and the
 Committee's procedures for dealing with serious ill health shall be commenced.
- If the Chairperson of any of the Committees involved considers that the student may have committed a legal offence, the Chairperson shall suspend proceedings and refer the circumstances to the Dean.

12.4 Procedures for dealing with a student's serious illness or disability likely to affect fitness to practice dentistry

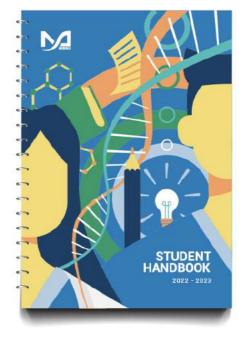
- Any member of the MBRU Community who has information, knowledge, or concern about any dental student's illness or disability likely to affect their fitness to practice medicine, has a responsibility to report to Dean.
- Dental students have a responsibility to report any illness or disability likely to affect their fitness to practice dentistry to the Dean.
- The following procedures shall be followed for students whose health is considered to make them unfit for dental practice.
- The case shall be referred to the Chairperson of an ad hoc Committee on Fitness to Practice convened by the Dean.
- The Committee shall investigate the student's fitness to practice based on the student's health or disability. The Committee shall make a decision based on the findings and shall communicate the decision in writing to the Dean.
- The Dean shall inform the student of the Committee's decision.
- A dental student shall have the right to appeal against a decision of the Committee on Fitness to Practice to the Dean, who may decide on whether to appoint an ad hoc Dispute Resolution Committee.
- No member of the Committee who has had any involvement or interest in the case shall take part in the procedures set out above.

13. Student Grievance and Appeals Policy

The university is dedicated to the highest standards of teaching, scholarship and research, and to the advancement of knowledge, in an environment of equality, tolerance and mutual respect for all its faculty, staff and students. To help achieve and maintain these standards, the university has in place a range of quality assurance mechanisms,

including the Student Grievance and Appeals procedure.

The Student Grievance and Appeals Policy aims to ensure that student concerns and grievances are taken seriously, investigated fully and objectively in a fair, timely and effective manner. The policy is detailed in the *Student Handbook*.



ACADEMIC INTEGRITY 15 **DEFINITION OF A CREDIT HOUR**



14. Academic Integrity

HBMCDM is a community of scholars whose members include its faculty, staff, students, and administrators. The basic objectives of HBMCDM are the dissemination, advancement and application of knowledge. Students of HBMCDM are members of the academic community and have both rights and responsibilities. The HBMCDM student's most essential right is the right to learn. HBMCDM is responsible to provide its students opportunities and experiences that best promote the learning process in all its aspects, enabling students to achieve their maximum potential.

HBMCDM places strong emphasis on attainment and expression by its students of those values and attitudes that are the hallmark of a dental professional. To this end, students are always expected to conduct themselves in a professional manner at all times in all their associations with the faculty, each other, auxiliary personnel, patients and HBMCDM staff. Once students begin treating patients, they continue to mature professionally and gain a deeper sense of responsibility. Anything less than the highest order of professional conduct on the part of the student can result in the loss of the patients' confidence in the student, HBMCDM and the profession.

Details on the students' expected behavior and the policies related to discipline, appeals and resolution of complaints are described in the MBRU *Student Handbook*, which will be made available to students after enrolment.

Furthermore, students are expected to cooperate in the learning process throughout the program of study by completing assignments of various kinds that are the product of their own study or research. Students must ensure that they are familiar with, and comply with, the college's regulations and procedures regarding academic malpractice and plagiarism. The definitions of Academic Malpractice and Plagiarism are reported hereafter. Further details on the related policies and procedures are described in the *Student Handbook*.

14.1. Definition of Academic Malpractice

Academic malpractice is any activity – intentional or otherwise – that is likely to undermine the integrity essential to scholarship or research. It includes plagiarism, collusion, fabrication or falsification of results, and anything else that could result in unearned or undeserved credit for those committing it. Academic malpractice can result from a deliberate act of cheating or may be committed unintentionally. Whether intended or not, all incidents of academic malpractice will be treated seriously by HBMCDM.

14.2. Definition of Plagiarism

Plagiarism is presenting the ideas, work or words of other people without proper, clear and unambiguous acknowledgement. It also includes 'self-plagiarism' (which occurs where, for example, you submit work that you have presented for assessment on a previous occasion), and the submission of material from 'essay banks' (even if the authors of such material appear to be giving you permission to use it in this way). Obviously, the most blatant example of plagiarism would be to copy another student's work. Hence it is essential to make clear in your assignments the distinction between the ideas and work of other people that you may have quite legitimately exploited and developed, and the ideas or material that you have personally contributed.

15. Definition of Credit Hour

Each course is assigned a number of credits. Credit assignment is for the sole purpose of calculating an overall grade point average. For a continuing course (a course that runs through more than one semester) the grade and credits are earned at the completion of the course.

1 credit = 1 hour in class and 2 hours independent learning for 16 weeks

1 credit = 2 hours in clinical skill facility/ lab or clinic for 20 weeks

1 credit = 2 hours as independent research work for 16 weeks





16. Definitions of Academic Terminology

The MSc program at HBMCDM is a postgraduate degree in Dentistry, which requires the successful completion of three years of study. Each year is comprised of approximately 40 weeks of study divided over two semesters. The graduate program is composed of clinical training, didactic coursework and a research project with a total requirement of 120 credit hours. The curricula of the Specialty Programs are defined with a set study plan which does not include major, minor or elective training.

17. Program Learning Outcomes and Completion Requirements

Completion of the MSc results in a specialist, competent in providing comprehensive, preventive and therapeutic care for patients.

The program will also prepare students for future roles in the areas of clinical research by stimulating and encouraging a critical and enquiring approach necessary for the advancement of dental practice, research, and teaching.

During their program, students will provide high quality clinical care to the patients. The students will become involved in service to their profession and to the community at large. All the College's dental specialty programs include areas of core knowledge that are common. The teaching of Core Clinical Science courses is delivered to students of all programs together. This generic teaching and learning foster an interdisciplinary appreciation by students.

All Specialist MSc Programs have the same *component* and *course* structure for teaching, learning and assessment. The academic part is taught with a range of learning styles and is informed by research.

The MSc Programs are consistent with the guidelines of the QFEmirates (level 9 in terms of credits, knowledge, skills, autonomy and responsibility, self-development, excess, progression and employability).

The main aim of the program is to give the student the range of skills and competency to practice as a specialist. The award of the MSc from MBRU is a higher degree that recognizes this achievement.

Graduation of a student requires satisfactory completion of all course requirements including clinical, didactic and research activities, as mentioned in the program syllabus.

The minimum GPA required for graduation is greater or equal to 3.0 for graduate students. The GPA is calculated on the total number of credits taken by the student.

17.1. Program Learning Outcomes

The MSc Programs at HBMCDM have the following learning outcomes aligned with the UAE Quality Framework Level 9.

A. Knowledge and Understanding

On completing the program students should have:

- **A1**. A systematic understanding of knowledge within and directly related to the specialty, and a critical awareness of current problems and new insights at the forefront of the field of study and area of professional practice.
- **A2**. A comprehensive understanding of techniques applicable to the clinical practice and their own research.
- **A3**. Originality in the application of clinical and scientific knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline.



Teaching and Learning Methods

A1. Is mainly by lectures, seminars which are completed during the three years of the course. Each seminar has a structured reading list prioritized where necessary into essential and recommended reading. These lists are reviewed annually.

A2 and A3. Students are given clinical teaching whilst treating patients with complex clinical problems and feedback is given on every clinic. Students engage in a research dissertation and biostatistics/research methodology course.

Learning strategy

Students are expected to have read up for each seminar and to engage in seminar discussion. Each student has a research project and is allocated suitable patients for diagnosis and treatment.

Assessment Strategy

A1 is assessed at the end of the first year by written exam and clinical scenarios.

Assessment of clinical knowledge is described below.

The dissertation literature review, data collection, methodology, results and discussion are assessed internally at the end of every semester and the whole dissertation is externally assessed at the end of the third year.

B. Intellectual and Practical Skills

On completing the program students should be able to:

- **B1.** Evaluate critically current research and advanced scholarship in the discipline.
- **B2.** Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.
- **B3.** Synthesize clinical findings to make a diagnosis and treatment plan or plan patient follow-up and appreciate their limitations and to take advice or refer a patient when appropriate.
- **B4.** Provide treatment for patients with moderate to difficult requirements.

Teaching and Learning Methods

- As for A1-A3 above.
- A statistical course and hands on sessions when analyzing the research project (B1, B2).
- One on one teaching on treatment clinics and diagnostic clinics (B3, B4).

Assessment Strategy

- Students' knowledge and its clinical application are evaluated summatively at the end of every semester by written examination.
- A log of a completed cases is kept and presented at the end of year 3.
- The research project involves an oral presentation followed by a defense before internal and external examiners at the end of year 3.

C. Attitudes

On completing the program, students should be able to:

- **C1.** Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.
- C2. Become life-long learners and educators.
- **C3**. Appreciate that evidence-based practice underpins patient care.



17.2. Program Learning Outcomes Alignment to QFE Level 9 Descriptors (Outcomes)

The MSc Programs are consistent with the guidelines of the National QFEmirates (level 9 in terms of credits, knowledge, skills, autonomy and responsibility, self-development, excess, progression and employability)

| | | | HBM | ICDM | Progra | am Le | arning |) Outc | omes | (PLOs) |) |
|-------|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-----------|
| | NQF Emirates PLOs (Level 9) | PL O A1 | PL O A2 | PL O A3 | PL 0 B1 | PL O B2 | PL 0 B3 | PL O B4 | PL 0 C1 | PL O C2 | PLO C3 |
| A. K | nowledge (K) | | | | | | | | | | |
| 9K1. | Comprehensive, highly specialized knowledge in a field of work, discipline and/or professional practice, and at the interface between different fields, including frontier concepts and recent developments | √ | √ | √ | | | √ | √ | √ | | |
| 9K2 | Advanced knowledge of applicable research principles and methods | | √ | √ | √ | √ | | | | | |
| 9K3 | Critical awareness of knowledge issues, as the basis for original thinking; encompassing appropriate processes of enquiry and current processes of knowledge production | √ | | √ | √ | | | | | √ | √ |
| 9K4 | Detailed body of knowledge of recent developments in a field of work, and/or discipline | √ | | √ | √ | √ | √ | √ | | √ | √ |
| B. SI | cills (SK) | | | | | | | | | | |
| 9SK1 | Advanced skills required in research, analysis, evaluation and/or innovation of complex ideas, information, concepts and/or activities | | √ | √ | √ | √ | | | | | |
| 9SK2 | Skills to develop new knowledge and procedures and to integrate knowledge from different fields using highly developed cognitive and creative skills and intellectual independence to the field of work or discipline | | | | √ | √ | √ | √ | | √ | √ |
| 9SK3 | to analyze highly complex issues with incomplete data and develop innovative solutions and proposals relevant to an academic/professional field, field of work or discipline | √ | √ | √ | | √ | √ | √ | | √ | |
| 9SK4 | Planning skills to develop and execute a major project or comparable activities (that includes a significant range of variables and complexity) with appropriately selected research methodologies producing sound conclusions | | √ | √ | | √ | | | | | |



| 9SK5 | Highly developed specialist communication and information technology skills to present, explain and/or critique highly | | √ | | √ | | | | √ | | |
|--------|--|-------|-------|---|-------|--|-------|---|---|---|---|
| | complex matters | | | | | | | | | | |
| | tonomy and responsibility (AR) | , | _ | _ | | <u>, </u> | | , | | , | |
| 9AR1 | Can function autonomously and/or take responsibility for managing professional practices, work, processes or systems, or learning contexts that are highly complex, unpredictable and unfamiliar, and require new strategic approaches and/or intervention or conceptual abstract solutions. | √ | √ | | √ | | √ | | √ | | |
| 9AR2 | Can account for high level governance of processes and systems | √ | | | | | | | √ | | |
| 9AR3 | Can analyze and reflect on socio- cultural norms and relationships and act to build and transform them | √ | | √ | √ | | | | √ | | |
| D. Ro | le in context (RC) | | | | | | | | | | |
| 9RC1 | Can initiate and manage professional activities that may include a highly complex environment | | | √ | √ | | | | | | |
| 9RC2 | Can take responsibility for leading the strategic performance and development of professional teams and self | | | | | | | | √ | √ | |
| E. Sel | f-Development (SD) | | | | | | | | | | |
| 9SD1 | Can self-evaluate and take responsibility for contributing to professional knowledge and practice including unfamiliar learning contexts | | √ | | | √ | | | | √ | √ |
| 9SD2 | Can develop and implement further learning consistently and sensitively | | √ | | | | | | | √ | |
| 9SD3 | Can consistently and sensitively manage highly complex ethical issues leading to informed, fair and valid decisions | | | √ | √ | | | | | | |



17.3. Course Alignment to Program Learning Outcomes

17.3.1. Common Courses Program Learning Outcomes

| 17.3.1. Common Cours | | | | | | utcomes | (PLOs) | | | | |
|--|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Courses | Course Code | PLO A1 | PLO A2 | PLO A3 | PLO B1 | PLO B2 | PLO B3 | PLO B4 | PLO C1 | PLO C2 | PLO C3 |
| Applied Basic Sciences I | CC510 | F | | Р | | | Р | | | | |
| CL01 | | Х | | Х | | | Х | | | | |
| CL02 | | Х | | Х | | | Х | | | | |
| CL03 | | Х | | Х | | | Х | | | | |
| CLO4 | | Х | | Х | | | Х | | | | |
| CL05 | | Х | | Х | | | Х | | | | |
| Clinical Governance, Legislation & Ethics | CC503 | F | Р | | | | F | | F | Р | |
| CL01 | | Х | Х | | | | Х | | Х | | |
| CLO2 | | Х | | | | | | | | Х | |
| CL03 | | Х | | | | | | | | | |
| CLO4 | | | Х | | | | | | | Х | |
| CL05 | | | | | | | Х | | | | |
| Research Methodology and Biostatistics | CC502 | Р | Р | Р | F | F | | | | Р | Р |
| CL01 | | | | Х | | | | | | | |
| CLO2 | | | | | Х | Х | | | | | |
| CL03 | | | | | Х | Х | | | | | |
| CLO4 | | Х | Х | Х | Х | Х | | | | | |
| CLO5 | | Х | Х | Х | Х | Х | | | | Х | |
| CL06 | | Х | Х | Х | Х | Х | | | | | Х |
| Applied Basic Sciences II | CC511 | F | | Р | | | Р | | | | |
| CL01 | | Х | | Х | | | Х | | | | |
| CLO2 | | Х | | Х | | | | | | | |
| CL03 | | Х | | Х | | | | | | | |
| CLO4 | | | | Х | | | Х | | | | |
| CLO5 | | Х | | Х | | | | | | | |



| Oral Epidemiology | CC508 | F | F | F | F | F | | | | Р |
|-----------------------|-------|---|---|---|---|---|---|---|---|---|
| CLO1 | | | | | х | Х | | | | |
| CLO2 | | Х | | | Х | Х | | | | |
| CLO3 | | Х | х | Х | | | | | | Х |
| CLO4 | | Х | х | Х | | | | | | Х |
| CL05 | | | | | Х | х | | | | |
| Radiology and Imaging | CC509 | F | Р | F | Р | Р | Р | Р | F | Р |
| CLO1 | | Х | Х | Х | | Х | Х | Х | Х | х |
| CL02 | | Х | Х | Х | Х | Х | Х | | | |
| CLO3 | | Х | Х | Х | | | Х | | | |
| CLO4 | | Х | Х | Х | Х | Х | | | Х | |
| CLO5 | | Х | Х | Х | | Х | Х | | | |
| CLO6 | | Х | Х | Х | | Х | Х | | | |
| Molecular Biology | CC504 | F | Р | | Р | F | Р | Р | F | Р |
| CL01 | | Х | Х | | Х | Х | Х | Х | | |
| CLO2 | | Х | Х | | Х | Х | Х | | | Х |
| CL03 | | Х | Х | | Х | Х | Х | Х | | Х |
| CLO4 | | | | | Х | Х | Х | | | |
| CL05 | | Х | Х | | | | Х | | | Х |
| CL06 | | Х | Х | | | | Х | Х | Х | Х |



17.3.2. Endodontics Program Learning Outcomes

| | | | | HBMCI | DM Prog | gram Lea | arning O | utcome | s (PLOs | ;) | |
|--|-----------------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Courses | Course Code | PL O A1 | PLO A2 | PLO A3 | PLO B1 | PLO B2 | PLO B3 | PLO B4 | PLO C1 | PLO C2 | PLO C3 |
| Examination and Diagnosis | EN841 | F | F | F | F | Р | Р | F | Р | Р | F |
| CLO1 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Χ |
| CLO3 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO4 | | Х | Х | Х | Х | Х | | Х | Х | | Х |
| CL05 | | Х | Х | | Х | | | Х | | | Х |
| CLO6 Specialty Clinical | | Х | Х | | Х | | | Х | | | Х |
| Training- Clinical Skill Facility | EN842 | F | F | Р | F | Р | Р | F | Р | Р | F |
| CLO1 | | Х | Х | Х | Х | | | Х | Х | Х | Χ |
| CLO2 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO3 | | Х | Х | Х | Х | | | | Х | Х | Х |
| CLO4 | | Х | Х | | | Х | | | | | Х |
| CLO5 | | Х | Х | Х | Х | Х | | | | | Χ |
| CLO6 | | Х | Х | Х | Х | Х | | Х | | | Х |
| CL07 | | х | | | | | | | | | Χ |
| CLO8 | | Х | | | | | | | | | Χ |
| Specialty Clinical Training- Clinic | EN837, 838, 839 | F | F | F | Р | Р | F | F | F | F | F |
| CLO1 | | Х | Х | Х | | Х | Х | Х | Х | | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | Х | Х | | Х |
| CLO3 | | Х | Х | Х | Х | Х | Х | Х | Х | | Х |
| CLO4 | | Х | Х | Х | | Х | Х | Х | Х | | |
| CLO5 | | Х | Х | Х | | | Х | Х | Х | | |
| CL06 | | Х | Х | Х | | | Х | Х | Х | | |
| CL07 | | Х | Х | Х | Х | | Х | Х | Х | | Х |
| CL08 | | Х | Х | Х | | | Х | Х | Х | Х | |
| CLO9 | | Х | Х | Х | Х | | Х | Х | Х | Х | х |
| CL010 | | Х | Х | Х | | | Х | Х | Х | Х | |
| Treatment Strategies and Plans in Endodontics & Pulp Therapy | EN843 | F | F | F | F | Р | Р | F | Р | Р | F |
| CL01 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CLO3 | | Х | Х | Х | Х | | Х | Х | | х | Х |
| CLO4 | | Х | Х | | | | Х | Х | Х | | Х |
| CLO5 | | Х | Х | | | | Х | Х | | | Х |



| Scientific Literature | EN821, 822, 823, 824 825, 826 | F | Р | F | F | Р | | | Р | F | F |
|--|----------------------------------|---|---|---|---|---|---|---|---|---|---|
| CLO1 | | Х | Х | Х | Х | | | | Х | | Х |
| CLO2 | | Х | Х | Х | Х | Х | | | Х | | Х |
| CLO3 | | Х | Х | Х | Х | | | | Х | Х | Х |
| CLO4 | | Х | | Х | Х | | | | Х | Х | Х |
| CLO5 | | Х | | Х | Х | Х | | | | Х | Х |
| CL06 | | Х | | Х | | | | | | Х | Х |
| Research Dissertation | EN812, 813, 814, 815, 816 | F | F | F | F | F | | | Р | Р | Р |
| CL01 | | Х | Х | Х | Х | Х | | | Х | | Х |
| CLO2 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| CLO3 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| CLO4 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| CLO5 | | Х | Х | Х | Х | Х | | | Х | | |
| CL06 | | Х | Х | Х | Х | Х | | | Х | | |
| CL07 | | Х | Х | Х | Х | Х | | | | Х | Х |
| CL08 | | Х | Х | Х | Х | Х | | | | | |
| CLO9 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| CL010 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| Non-Surgical Root Canal Treatment | EN844 | F | F | F | F | Р | Р | | Р | Р | F |
| CL01 | | Х | Х | Х | Х | Х | Х | | | | Х |
| CLO2 | | Х | Х | Х | Х | | | | | Х | Х |
| CL03 | | Х | Х | Х | Х | | Х | | | | Х |
| CLO4 | | Х | Х | Х | | | | | Х | | Х |
| Periodontology and Prosthodontics for Endodontic Specialists | EN854 | F | F | Р | Р | Р | Р | F | Р | Р | F |
| CL01 | | Х | Х | Х | | Х | | Х | | | Х |
| CLO2 | | Х | Х | Х | | Х | | Х | Х | Х | Х |
| CLO3 | | Х | Х | Х | Х | | | Х | | | Х |
| CLO4 | | Х | Х | Х | | | Х | Х | Х | Х | Х |
| CL05 | | Х | Х | | | | | Х | | | |
| CLO6 | | Х | Х | | Х | | | Х | | | |
| Non-Surgical Root Canal Retreatment | EN846 | F | F | F | F | Р | Р | F | Р | Р | F |
| CL01 | | Х | Х | Х | Х | | Х | Х | Х | | Х |
| CL02 CL03 | | X | X | X | X | Х | | Х | Х | | X |
| CL03 | | X | X | X | X | | | | | Х | X |



| Microbiology | EN852 | F | Р | F | F | Р | F | | | F | F |
|----------------------------------|-------|---|---|---|---|---|---|---|---|---|---|
| CL01 | | Х | Х | Х | Х | Х | | | | | |
| CLO2 | | Х | Х | Х | Х | Х | | | | | Х |
| CLO3 | | Х | Х | Х | Х | Х | | | | | |
| CLO4 | | Х | Х | Х | | | Х | | | | Х |
| CLO5 | | Х | | Х | | | Х | | | Х | Х |
| Surgical Root Canal Treatment | EN849 | F | F | F | F | Р | Р | F | Р | Р | F |
| CL01 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | |
| CLO3 | | Х | Х | Х | Х | | Х | Х | | | |
| CLO4 | | Х | Х | Х | | | Х | | | | |
| CLO5 | | Х | Х | Х | Х | Х | | | | | |
| CLO6 | | Х | Х | Х | | Х | Х | Х | Х | Х | |
| Dental Traumatology | EN850 | F | F | F | F | Р | Р | F | Р | Р | F |
| CLO1 | | Х | Х | Х | Х | Х | Х | Х | Х | | Х |
| CLO2 | | Х | Х | Х | Х | | Х | Х | Х | | Х |
| CLO3 | | Х | Х | Х | Х | | | Х | | | Х |
| CLO4 | | Х | Х | Х | | Х | Х | Х | | | Х |
| CL05 | | Х | Х | Х | | | | Х | Х | Х | |

<u>Decide how much a course contributes to the overall program outcomes</u>
Fully (F)
Partly (P)



17.3.3. Orthodontics Program Learning Outcomes

| Courses | Course Code | НВМО | CDM Prog | gram Lea | rning Outc | omes (PLC | Os) | | | | |
|--------------------------------|-----------------------------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| | | PLO A1 | PLO A2 | PLO A3 | PLO B1 | PLO B2 | PLO B3 | PLO B4 | PLO C1 | PLO C2 | PLO C3 |
| Temporomandibular disorders | PR366 | F | Р | F | Р | F | | Р | Р | F | Р |
| CLO1 | | Х | Х | Х | | | | | | | |
| CLO2 | | Х | Х | Х | Х | Х | | Х | Х | Х | Х |
| CLO3 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO4 | | Х | Х | Х | Х | | | Х | Х | Х | Х |
| CLO5 | | | Х | | | Х | | | | | |
| CL06 | | Х | Х | Х | Х | Х | | Х | Х | Х | Х |
| CL07 | | Х | Х | Х | Х | Х | | Х | Х | Х | Х |
| CL08 | | Х | | Х | Х | | | | Х | Х | Х |
| CLO9 | | Х | | Х | Х | | | | Х | Х | Х |
| CL010 | | Х | | Х | Х | Х | | | Х | | Х |
| Research Dissertation | OR611/612/ 613/614/615/ 616 | F | F | F | F | F | | | Р | Р | Р |
| CLO1 | | Х | Х | Х | Х | Х | | | Х | | Х |
| CLO2 | | Х | Х | Х | Х | Х | | | Х | | Х |
| CLO3 | | Х | Х | Х | Х | Х | | | Х | | Х |
| CLO4 | | Х | Х | Х | Х | Х | | | Х | | Х |
| CLO5 | | Х | Х | Х | Х | Х | | | Х | | Х |
| CLO6 | | Х | Х | Х | Х | Х | | | Х | | Х |
| CL07 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| CLO8 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| CLO9 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| CL010 | | Х | XX | Х | Х | Х | | | Х | Х | Х |
| Scientific Literature | OR621/622/62 3/624/625/ 626 | F | Р | F | F | Р | Р | Р | Р | F | F |
| CLO1 | | Х | Х | | Х | Х | Х | Х | | | |
| CLO2 | | | | | | Х | Х | Х | Х | | |
| CLO3 | | Х | Х | Х | Х | Х | Х | | Х | Х | Х |
| CLO4 | | Х | Х | Х | | Х | Х | | Х | Х | Х |
| CLO5 | | | | | Х | Х | Х | Х | Х | Х | Х |
| CLO6 | | Х | Х | Х | Х | | | Х | Х | Х | Х |
| Specialty Clinical Training | OR637/638/ 639 | F | F | F | Р | Р | F | F | F | F | F |
| CLO1 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO2 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO3 | | Х | Х | Х | | | | | | Х | Х |
| CLO4 | | Х | Х | Х | | Х | | | | | |
| CLO5 | | Х | Х | Х | | | | Х | Х | | |
| CLO6 | | Х | Х | Х | | Х | | | | Х | Х |
| CL07 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CL08 | | Х | Х | Х | | | | Х | Х | | |



| Clinical Skills | OR641 | F | F | F | | | F | F | F | F | Р |
|--|-------|---|---|---|---|---|---|---|---|---|---|
| CL01 | | Х | Х | Х | | | Х | Х | Х | Х | Х |
| CLO2 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO3 | | Х | Х | Х | | | Х | Х | Х | Х | Х |
| Basic Science Relevant to Orthodontics | OR642 | F | Р | F | Р | F | | Р | Р | F | Р |
| CLO1 | | Х | Х | Х | X | X | | Х | Х | Х | X |
| CLO2 | | Х | Х | Х | Х | X | | Х | Х | Х | Х |
| CLO3 | | Х | Х | Х | Х | X | | Х | Х | Х | Х |
| CLO4 | | Х | Х | Х | Х | X | | Х | Х | Х | Х |
| CLO5 | | Х | Х | Х | Х | X | | Х | Х | Х | Х |
| Orthodontic Diagnosis and Treatment Planning | OR643 | F | F | F | Р | Р | | F | F | Р | F |
| CL01 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO2 | | Х | Х | Х | Х | Х | | Х | | Х | Х |
| CLO3 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO4 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO5 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CL06 | | Х | Х | Х | Х | Х | | Х | | Х | Х |
| CL07 | | Х | Х | Х | Х | Х | | Х | Х | Х | Х |
| CL08 | | Х | Х | Х | | | | Х | Х | Х | Х |
| Growth Assessment – Cephalometric Methods for Assessment of Dentofacial Changes | OR644 | F | Р | Р | F | Р | | F | F | | Р |
| CLO1 | | Х | Х | Х | Х | Х | | Х | Х | | X |
| CLO2 | | Х | X | X | X | X | | X | Х | | X |
| CLO3 | | Х | X | X | X | X | | X | Х | | X |
| CLO4 | | Х | X | X | X | X | | X | X | | X |
| CLO5 | | Х | X | X | X | X | | X | X | | X |
| CL06 | | Х | Х | Х | Х | Х | | Х | Х | | Х |
| CL07 | | Х | Х | Х | Х | Х | | Х | Х | | Х |
| Dentofacial Orthopedics and Temporomandibular Dysfunction | OR655 | F | Р | Р | F | Р | F | F | | | Р |
| CL01 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CLO3 | | Х | Х | Х | X | X | Х | Х | | | X |
| CLO4 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CLO5 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CL06 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CL07 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CL08 | | Х | Х | Х | Х | Х | Х | Х | | | Х |
| CLO9 | | | | | | | | | | - | |



| Orthodontic Materials | OR656 | F | F | F | F | Р | F | F | | Р |
|---|--------|---|---|---|---|---|---|---|---|---|
| and Appliances | | | | | | | | | | |
| | | | | | | | | | | |
| CL01 | | Х | Х | Х | Х | Х | Х | Х | | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | Х | | Х |
| CL03 | | Х | Х | Х | Х | Х | Х | Х | | Х |
| CLO4 | | Х | Х | Х | Х | Х | Х | Х | | Х |
| CLO5 | | Х | Х | Х | Х | Х | Х | Х | | Х |
| CLO6 | | Х | Х | Х | Х | Х | Х | Х | | Х |
| CL07 | | Х | Х | Х | Х | Х | Х | Х | | Х |
| CL08 | | Х | Х | Х | Х | Х | Х | Х | | Х |
| CLO9 | | X | Х | Х | Х | Х | Х | Х | | X |
| Craniofacial | OR647 | F | F | F | F | Р | F | F | F | Р |
| Development and | | | | | | | | | | |
| Cephalometric Assessment | | | | | | | | | | |
| CL01 | | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO2 | | X | Х | Х | X | X | X | Х | X | X |
| CLO3 | | X | Х | X | X | X | X | Х | X | Х |
| CLO4 | | X | X | X | X | X | X | X | X | X |
| Long-term Effects of | OR648 | F | F | F | P | ^ | F | F | ^ | P |
| Orthodontic Treatment – latrogenic Effects of | 011040 | ľ | , | ľ | , | | ľ | , | | ' |
| Orthodontic Treatment CL01 | | Х | Х | Х | Х | | Х | Х | | Х |
| CLO2 | | X | X | X | X | | X | X | | X |
| CLO3 | | X | X | X | X | | X | X | | X |
| CLO4 | | X | X | X | X | | X | X | | X |
| CLO5 | | X | X | X | X | | X | X | | X |
| CLO6 | | | | | | | | | | |
| CL07 | | X | X | X | X | | X | X | | Х |
| | ODCEZ | X | X | X | Х | | X | X | Р | Х |
| Orthodontic Tooth Movement and Biomechanics | OR657 | F | F | P | | | F | r | P | |
| CL01 | | Х | Х | Х | | | Х | Х | Х | |
| CLO2 | | Х | Х | Х | | | Х | Х | Х | |
| CLO3 | | Х | Х | Х | | | Х | Х | Х | |
| CLO4 | | Х | Х | Х | | | Х | Х | Х | |
| CLO5 | | Х | Х | Х | | | Х | Х | Х | |
| Adult Orthodontics | OR650 | F | F | F | | | F | F | Р | |
| CL01 | | Х | Х | Х | | | Х | Х | Х | |
| CLO2 | | Х | Х | Х | | | Х | Х | Х | |
| CLO3 | | Х | Х | Х | | | Х | Х | Х | |
| CLO4 | | Х | Х | Х | | | Х | Х | Х | |
| CLO5 | | Х | Х | Х | | | Х | Х | Х | |
| Orthodontic | OR658 | F | F | F | | | F | F | F | |
| Techniques CLO1 | | Х | Х | Х | | | Х | Х | Х | |
| CLO2 | | Х | Х | Х | | | Х | Х | Х | |
| CLO3 | | Х | Х | Х | | | Х | Х | Х | |
| CLO4 | | Х | Х | Х | | | Х | Х | Х | |



| CLO5 | | Х | Х | Х | | | Х | Х | Х | | |
|---|-------|-----------------------|-----------------------|-------------|-------------|---|------------------|------------------|------------------|--------|------------------|
| CLO6 | | Х | Х | Х | | | Х | Х | Х | | |
| CL07 | | Х | Х | Х | | | Х | Х | Х | | |
| CL08 | | Х | Х | Х | | | Х | Х | Х | | |
| CLO9 | | Х | Х | Х | | | Х | Х | Х | | |
| Guiding the Development of the Occlusion | OR652 | F | F | F | Р | | F | F | F | | Р |
| CLO1 | | Х | Х | Х | Х | | Х | Х | Х | | Х |
| CLO2 | | Х | Х | Х | Х | | Х | Х | Х | | Х |
| CLO3 | | Х | Х | | | | Х | Х | Х | | Х |
| CLO4 | | Х | Х | Х | Х | | | | Х | | Х |
| CLO5 | | Х | Х | Х | Х | | | | Х | | Х |
| CLO6 | | Х | Х | Х | Х | | Х | Х | Х | | Х |
| CL07 | | Х | Х | | | | Х | Х | Х | | Х |
| CL08 | | Х | Х | | | | Х | Х | Х | | Х |
| CLO9 | | Х | Х | Х | Х | | Х | Х | Х | | |
| CL010 | | Х | Х | Х | Х | | Х | Х | Х | | |
| Multidisciplinary Treatment Modalities | OR653 | F | F | F | Р | | F | F | F | Р | F |
| CL01 | | Х | Х | Х | Х | | Х | Х | Х | Х | Х |
| CLO2 | | Х | X | X | X | | Х | Х | X | X | X |
| CLO3 | | Х | Х | Х | X | | Х | Х | Х | | X |
| CLO4 | | Х | Х | Х | X | | Х | Х | Х | | X |
| CLO5 | | Х | Х | Х | X | | Х | | | | Х |
| CL06 | | | | | | | | | | | |
| | | X | Х | Х | X | | Х | | | | Х |
| CLO7 | | X | X | Х | Х | | X | Х | X | X | X |
| CL07 CL08 | | | | Х | Х | | | X | X | X | |
| | | Х | Х | X | X | | Х | | | | Х |
| CL08 | | X | X | | | | X | Х | Х | Х | X |
| CLO8 CLO9 | | X X | X X | Х | Х | | X | Х | Х | Х | X X X |
| CLO8 CLO9 CLO10 | | X X X | X X X | X | X | | X | Х | Х | Х | X X X |
| CL08 CL09 CL010 CL011 | | X X X | X X X | X | X | | X X X | X | X | Х | X X X X |
| CL08 CL09 CL010 CL011 CL012 CL013 Consolidation of | OR659 | X X X X | X X X X | X X X | X X X | P | X X X | X | X | Х | X X X X |
| CL08 CL09 CL010 CL011 CL012 CL013 | OR659 | X X X X X | X X X X X | X X X | X X X | P | X X X | X X X | X X X | X X | X X X X X X |
| CL08 CL09 CL010 CL011 CL012 CL013 Consolidation of Orthodontic Training | OR659 | x x x x x x x x F | X X X X X X P | X X X | X X X | | X X X X | X X X X | X X X X | X X | X X X X X X P |

Decide how much a course contributes to the overall program outcomes
Fully (F)
Partly (P)



17.3.4. Pediatric Dentistry Program Learning Outcomes

| | | НВМС | M Progran | n Learnir | ng Outcor | mes (PLO | s) | | | | |
|---|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Courses | Course Code | PLO A1 | PLO A2 | PLO A3 | PLO B1 | PLO B2 | PLO B3 | PLO B4 | PLO C1 | PLO C2 | PLO C3 |
| Introduction to Pediatric Dentistry | PD441 | F | F | F | Р | Р | F | F | Р | F | Р |
| CL01 | | Х | Х | Х | | | х | | Х | Х | |
| CLO2 | | Х | Х | Х | Х | Х | Х | | Х | Х | |
| CLO3 | | Х | Х | Х | | | Х | | | | |
| CLO4 | | Х | Х | Х | | | Х | Х | Х | Х | Х |
| CLO5 | | Х | Х | Х | | | Х | Х | Х | | |
| Restorative Techniques | PD442 | F | F | F | Р | Р | F | F | Р | F | Р |
| CLO1 | | Х | Х | Х | | | | Х | Х | | |
| CLO2 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO3 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO4 | | Х | Х | Х | | | | Х | Х | Х | Х |
| Scientific Literature | PD421/422/423 /424/425/426 | F | Р | F | F | Р | Р | Р | Р | F | F |
| CLO1 | | Х | | | Х | Х | х | Х | | | |
| CLO2 | | | | | Х | Х | Х | Х | | | |
| CLO3 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO4 | | | | | Х | Х | Х | Х | | | |
| CLO5 | | | | | Х | Х | Х | Х | Х | | |
| CLO6 | | Х | Х | Х | Х | | | Х | Х | Х | Х |
| Specialty Clinical training including Clinical Skills Lab | PD437/438/439 | F | F | F | Р | Р | F | F | F | F | F |
| CLO1 | | Х | Х | Х | | | | | | | |
| CLO2 | | Х | Х | Х | | | | Х | Х | | |
| CLO3 | | Х | Х | Х | | | | | | Х | Х |
| CLO4 | | Х | Х | Х | | | | | | | |
| CLO5 | | Х | Х | Х | | | | Х | Х | | |
| CLO6 | | Х | Х | Х | | | | Х | | | |
| CL07 | | Х | Х | Х | | | | | Х | | |
| CL08 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO9 | | Х | Х | Х | | | | Х | Х | | |
| CL010 | | Х | Х | Х | | | Х | Х | Х | Х | Х |
| CL011 | | | | | | | Х | Х | Х | Х | Х |
| CL012 | | Х | Х | Х | Х | Х | Х | | | | |
| CL013 | | | | | | | | | Х | Х | Х |



| Research | PD411/412/413 | | | | | F | F | | | | | Р | Р | Р |
|--|---------------|---|---|---|---|---|---|---|---|---|---|---|---|-----|
| Dissertation | /414/415/416 | | | | | | | | | | | r | Г | ļ r |
| CLO1 | | | | | | Х | Х | | | | | | | |
| CLO2 | | | | | | Х | Х | | | | | | | |
| CL03 | | | | | | Х | Х | | | | | | | |
| CLO4 | | | | | | Х | Х | | | | | | | |
| CLO5 | | | | | | Х | Х | | | | | | | Х |
| CL06 | | | | | | Х | Х | | | | | Х | | |
| CL07 | | | | | | Х | Х | | | | | | | |
| CL08 | | | | | | Х | Х | | | | | | | |
| CLO9 | | | | | | Х | Х | | | | | | | |
| CL010 | | | | | | Х | Х | | | | | Х | Х | |
| Orthodontic Diagnosis and Treatment Planning | OR643 | F | F | F | | Р | Р | | Р | | F | Р | F | Р |
| CL01 | | Х | Х | Х | (| Х | | | Х | | Х | Х | | |
| CLO2 | | | | | | Х | Х | | Х | | Х | | | |
| CLO3 | | Х | Х | Х | (| | | | Х | | Х | Х | | |
| CLO4 | | Х | Х | Х | (| | | | | | | Х | Х | Х |
| Pediatric Oral Pathology and Medicine | PD443 | F | F | F | = | | | | F | | F | Р | F | Р |
| CL01 | | Х | Х | Х | (| | | | Х | | Х | Х | | |
| CLO2 | | Х | Х | х | (| | | | Х | | Х | | | |
| CLO3 | | Х | Х | Х | (| | | | | | Х | Х | | |
| CLO4 | | Х | Х | Х | (| | | | | | Х | Х | Х | Х |
| Orthodontics for the Pediatric Dentists | PD444 | F | F | F | = | Р | Р | | F | | F | Р | F | Р |
| CLO1 | | Х | Х | Х | (| Х | Х | | Х | | Х | Х | Х | Х |
| CLO2 | | Х | Х | X | (| Х | Х | | | | X | | | |
| CLO3 | | Х | Х | Х | (| | | | | | Х | | | |
| CLO4 | | Х | Х | Х | (| Х | Х | | Х | | Х | Х | Х | Х |
| Behavioral Science | PD446 | F | F | F | | Р | Р | F | | F | | Р | F | Р |
| CL01 | | Х | Х | Х | | Х | Х | | | Х | | Х | | |
| CLO2 | | Х | Х | Х | | | | | | | | Х | | |
| CLO3 | | Х | Х | Х | | | | Х | | Х | | | | |
| CLO4 | | Х | Х | Х | | | | Х | | Х | | Х | | |
| CLO5 | | Х | | | | | | | | Х | | Х | Х | |
| CL06 | | Х | Х | Х | | Х | Х | Х | | Х | | Χ | Х | Х |
| General Pediatrics | PD445 | F | F | F | | Р | Р | F | | F | | Р | F | Р |
| CL01 | | Х | Х | Х | | Х | Х | Х | | Х | | Х | Х | Х |
| CLO2 | | Χ | Х | Х | | Х | | Х | | Х | | Х | | |
| CL03 | | Х | Х | Х | | Х | | Х | _ | Х | | | | |



| Basic Sciences in Pediatric Dentistry | PD450 | F | F | F | Р | Р | Р | F | Р | F | Р |
|---|------------------|---|---|---|---|---|---|---|---|---|---|
| CLO1 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO2 | | Х | Х | Х | Х | | Х | Х | Х | | |
| CLO3 | | Х | Х | Х | Х | | Х | Х | | | |
| Dental Traumatology | PD451 | F | F | F | Р | Р | F | F | Р | F | Р |
| CLO1 | | Х | Х | Х | | | Х | | | | |
| CLO2 | | Х | Х | Х | | | Х | Х | | | |
| CLO3 | | Х | Х | Х | Х | Х | Х | Х | | | |
| CLO4 | | Х | Х | Х | Х | Х | Х | Х | Х | | |
| CLO5 | | х | Х | Х | | | | Х | Х | Х | x |
| Prevention of Oral Disease | PD448 | F | F | F | Р | Р | F | F | Р | F | Р |
| CLO1 | | Х | Х | Х | | | Х | | | | |
| CLO2 | | Х | Х | Х | Х | Х | | | | | |
| CLO3 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO4 | | Х | Х | Х | | | | Х | Х | Х | |
| CLO5 | | Х | Х | Х | | Х | | Х | Х | Х | |
| Consolidation of Pediatric Dentistry Training 1 & 2 | PD454/455 | F | Р | Р | Р | Р | F | F | Р | F | F |
| CLO1 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO3 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO4 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO5 | uch a course cor | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |

Decide how much a course contributes to the overall program outcomes

Fully (F) Partly (P)



17.3.5. Periodontology Program Learning Outcomes

| | | | | HE | BMCDM Pi | ogram L | earning Ou | ıtcomes (F | PLOs) | | |
|---|---------------|-----|-----|-----|---------------------------------------|---------|------------|------------|---------------------------------------|-----|-----|
| Courses | Course Code | PLO | PLO | PLO | PLO | PLO | PLO | PLO | PLO | PLO | PLO |
| Basic Biological | | A1 | A2 | A3 | B1 | B2 | В3 | B4 | C1 | C2 | C3 |
| Science Relevant to Periodontics | PE241 | F | F | F | F | Р | Р | F | Р | Р | F |
| CL01 | | Х | | | х | | Х | | | | Х |
| CLO2 | | X | Х | | | Х | X | | | | X |
| CLO3 | | | | Х | | ^ | ^ | X | | X | ^ |
| CLO4 | | X | | | Х | | | | | X | |
| CLO5 | | X | Х | Х | | | Х | Х | Х | | Х |
| CLO6 | | X | | | | | | | , , , , , , , , , , , , , , , , , , , | Х | |
| CL07 | | X | | | Х | Х | | Х | | Х | Х |
| CLO8 | | X | | Х | X | | Х | X | Х | | Х |
| Specialty | | | | | , , , , , , , , , , , , , , , , , , , | | ^ | , A | ^ | | X |
| Clinical Training- Clinic | PE237/238/239 | F | F | F | Р | Р | F | F | F | F | F |
| CLO1 | | Х | Х | | | | Х | Х | Х | Х | х |
| CLO2 | | | Х | Х | | Х | | Х | Х | Х | х |
| CLO3 | | Х | Х | Х | Х | Х | | Х | Х | | х |
| CLO4 | | Х | Х | Х | | Х | Х | Х | Х | | Х |
| CLO5 | | Х | Х | | Х | | | Х | Х | | |
| CL06 | | Х | Х | Х | Х | | Х | Х | Х | Х | х |
| CL07 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO8 | | Х | Х | Х | | Х | | Х | Х | | |
| CLO9 | | Х | Х | Х | Х | Х | Х | Х | Х | Х | Х |
| CL010 | | Х | Х | | | | Х | Х | Х | Х | Х |
| CL011 | | | Х | Х | | Х | | Х | Х | Х | Х |
| CL012 | | Х | Х | Х | Х | Х | | Х | Х | | Х |
| CL013 | | Х | Х | Х | | Х | Х | Х | Х | | Х |
| CL014 | | Х | Х | | Х | | | Х | Х | | |
| Diagnosis and Treatment Planning in Periodontics | PE243 | F | F | F | F | Р | Р | F | Р | Р | F |
| CL01 | | Х | | | Х | | Х | | | | Х |
| CLO2 | | Х | Х | | | Х | Х | | | | Х |
| CLO3 | | | | Х | | | | Х | | Х | |
| CLO4 | | Х | | | Х | | | | | Х | |
| CLO5 | | Х | Х | Х | | | Х | Х | Х | | Х |
| CL06 | | Х | | | | | | | | Х | |
| CL07 | | Х | | | Х | Х | | Х | | Х | х |



| Research Dissertation | PE211/212/213 214/215/216 | F | F | F | F | F | | | Р | Р | Р |
|--------------------------|-------------------------------|----|----|----|----|----|----|----|---|---|----|
| CLO1 | | Х | х | | Х | х | | | Х | | Х |
| CLO2 | | | Х | Х | | Х | | | | Х | |
| CLO3 | | Х | Х | Х | Х | Х | | | | Х | Х |
| CLO4 | | Х | Х | Х | Х | | | | Х | Х | Х |
| CLO5 | | Х | | Х | Х | Х | | | Х | Х | Х |
| CLO6 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| CL07 | | | Х | Х | Х | Х | | | | Х | Х |
| CLO8 | | Х | Х | Х | Х | Х | | | Х | Х | Х |
| CLO9 | | Х | Х | Х | Х | | | | | Х | Х |
| CL010 | | | Х | | Х | Х | | | Х | Х | Х |
| Scientific Literature | PE221/222/223/22 4/225/226 | F | Р | F | F | Р | Р | Р | Р | F | F |
| CLO1 | | Х | Х | | Х | Х | Х | | Х | | Х |
| CLO2 | | | Х | Х | | Х | | Х | | Х | |
| CLO3 | | Х | Х | Х | Х | Х | Х | Х | | Х | Х |
| CLO4 | | Х | х | х | Х | | Х | | Х | Х | Х |
| CLO5 | | Х | | Х | Х | Х | Х | Х | Х | Х | Х |
| CLO6 | | Х | Х | Х | Х | Х | | Х | Х | Х | Х |
| CL07 | | | Х | Х | Х | Х | Х | | | Х | Х |
| CLO8 | | Х | Х | Х | Х | Х | Х | | Х | Х | Х |
| CLO9 | | Х | Х | Х | Х | | | Х | | Х | Х |
| CL010 | | | Х | | Х | Х | Х | Х | Х | Х | Х |
| CL011 | | Х | х | | Х | Х | Х | Х | Х | | Х |
| Non-surgical | D=0.14 | _ | _ | _ | _ | | | _ | | | _ |
| Periodontal Treatment | PE244 | F | F | F | F | Р | Р | F | Р | Р | F |
| CLO1 | | Х | | | Х | | Х | | | | Х |
| CLO2 | | Х | х | | | Х | Х | | | | Х |
| CLO3 | | | Х | Х | | Х | | | | Х | |
| CLO4 | | Х | | | Х | | | | | Х | |
| CLO5 | | Х | Х | | | | Х | Х | Х | | Х |
| CLO6 | | Х | | Х | | | Х | | | Х | |
| Periodontal | PE249 | F | F | F | F | Р | Р | F | Р | Р | F |
| Surgery CLO1 | | | | | | | | | | | |
| CLO2 | | X | v | | Х | v | X | | | | X |
| CLO2 | | Х | Х | v | | Х | Х | v | | | Х |
| CLO3 | | ., | | Х | ., | | | Х | | X | |
| CLO4 CLO5 | | X | ., | ., | Х | | ., | | | Х | 37 |
| CLO5 | | X | Х | Х | | | Х | Х | Х | | Х |
| | | Х | | ., | ., | ., | | ., | | X | |
| CL07 | | Х | | Х | Х | Х | | Х | | Х | Х |



| Basic Implant Surgical and Restorative Techniques | PR351 | F | F | F | F | Р | F | | | | F |
|--|-------------|-------|----------|----------|-----------|---------|---|---|---|---|---|
| CL01 | | Х | Х | | | | Х | | | | |
| CLO2 | | Х | Х | Х | | | | | | | Х |
| CLO3 | | Х | Х | Х | | | | | | | Х |
| CLO4 | | Х | | Х | Х | Х | Х | | | | Х |
| CLO5 | | Х | Х | | Х | Х | | | | | Х |
| Interdisciplinary Interfaces | PE246 | F | F | F | Р | | F | F | F | Р | F |
| CL01 | | Х | | Х | Х | | Х | | Х | | Х |
| CLO2 | | Х | Х | | | | Х | | | | Х |
| CLO3 | | Х | | Х | | | | Х | | Х | |
| CLO4 | | Х | | | Х | | | | | Х | |
| CLO5 | | Х | Х | Х | | | Х | Х | Х | | Х |
| CL06 | | Х | | | | | | | | Х | |
| CL07 | | Х | | Х | Х | | | Х | | Х | Х |
| CL08 | | Х | | Х | Х | | Х | | Х | | Х |
| CLO9 | | Х | Х | | | | Х | | | | Х |
| CL010 | | | Х | Х | | | | Х | | Х | |
| CL011 | | Х | | | Х | | Х | | | Х | |
| Advanced Implant Surgical and Restorative Techniques | PR352 | F | F | F | F | Р | F | | | | F |
| CLO1 | | Х | Х | Х | Х | Х | Х | | | | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | | | | Х |
| CLO3 | | Х | Х | Х | Х | Х | Х | | | | Х |
| CLO4 | | Х | Х | Х | Х | | Х | | | | Х |
| Mucogingival Surgery and Regenerative Techniques | PE250 | F | F | F | F | Р | Р | F | Р | Р | F |
| CL01 | | Х | | | Х | | Х | | | | Х |
| CLO2 | | Х | Х | | | Х | Х | | | | Х |
| CL03 | | | | Х | | | | Х | | Х | |
| CLO4 | | Х | | | Х | | | | | Х | |
| CLO5 | | Х | Х | Х | | | Х | Х | Х | | Х |
| CL06 | | Х | | | | | | | | Х | |
| CL07 | | Х | | | Х | Х | | Х | | Х | Х |
| Oral Pathology and Oral Medicine | PE256 | F | Р | F | Р | F | | Р | Р | F | Р |
| CLO1 | | Х | | | Х | | Х | | | | Х |
| CLO2 | | Х | Х | | | Х | Х | | | | Х |
| CLO3 | | Х | | Х | | Х | | Х | | Х | |
| Consolidation of Periodontics Training | PE259 | F | Р | Р | Р | Р | F | F | Р | Р | Р |
| CLO1 | | Х | | Х | Х | | Х | | Х | | Х |
| Decide how much a co | urse contri | hutes | to the o | verall n | rogram oi | itcomes | | • | | | |

Decide how much a course contributes to the overall program outcomes

Fully (F) Partly (P)



17.3.6. Prosthodontic Program Learning Outcomes

| | | | | НВМО | DM Prog | ıram Lea | rning Out | comes (F | PLOs) | | |
|---|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Courses | Course Code | PLO A1 | PLO A2 | PLO A3 | PLO B1 | PLO B2 | PLO B3 | PLO B4 | PLO C1 | PLO C2 | PLO C3 |
| Temporomandibular disorders | PR366 | F | Р | F | Р | F | | Р | Р | F | Р |
| CL01 | | Х | Х | Х | | | | | | | |
| CLO2 | | Х | Х | Х | Х | Х | | Х | Х | Х | Х |
| CLO3 | | Х | Х | Х | | | | Х | Х | Х | Х |
| CLO4 | | Х | Х | Х | Х | | | Х | Х | Х | Х |
| CLO5 | | | Х | | | Х | | | | | |
| CL06 | | Х | Х | Х | Х | Х | | Х | Х | Х | Х |
| CL07 | | Х | Х | Х | Х | Х | | Х | Х | Х | Х |
| CL08 | | Х | | Х | Х | | | | Х | Х | Х |
| CLO9 | | Х | | Х | Х | | | | Х | Х | Х |
| CL010 | | Х | | Х | Х | Х | | | Х | | Х |
| Cariology, Tooth Wear, Compromised Dentitions and Restorations | PR367 | F | F | F | F | F | F | | | | F |
| CLO1 | | Х | Х | | Х | | | | | Х | Х |
| CLO2 | | Х | | Х | Х | Х | | | | | Х |
| CLO3 | | Х | Х | | | Х | | | | Х | Х |
| CLO4 | | Х | | Х | Х | Х | | | | | Х |
| CLO5 | | | | Х | | Х | Х | | | Х | Х |
| Principles of Fixed Prosthodontics | PR346 | F | F | F | F | Р | F | | | | F |
| CL01 | | Х | | | | Х | Х | | | Х | Х |
| CLO2 | | | Х | Х | Х | | | Х | Х | | Х |
| CLO3 | | Х | | | | Х | | Х | Х | | Х |
| CLO4 | | | Х | Х | Х | | Х | | | Х | |
| CLO5 | | Х | Х | | | | Х | Х | | | Х |
| CLO6 | | Х | | | | Х | | | Х | | |
| CL07 | | Х | | Х | | Х | Х | | | Х | |



| Advanced | PR331 | F | F | F | F | Р | F | F | F | F |
|---|---------------------------------|---|---|---|---|---|---|---|---|---|
| prosthodontics: Clinical skills facility | | | | | | | | | | |
| CLO1 | | Х | Х | | | Х | Х | Х | Х | Х |
| CLO2 | | Х | Х | | | X | X | Х | X | Х |
| CLO3 | | Х | Х | | | Х | Х | Х | Х | Х |
| CLO4 | | Х | Х | | | Х | Х | Х | Х | Х |
| CLO5 | | Х | Х | | | Х | Х | Х | Х | Х |
| CLO6 | | Х | Х | | | Х | | Х | Х | Х |
| CL07 | | Х | Х | Х | | Х | | Х | | Х |
| CL08 | | Х | Х | Х | Х | Х | | Х | | Х |
| CLO9 | | Х | Х | Х | Х | Х | | Х | | Х |
| CL010 | | Х | Х | Х | Х | | | Х | | Х |
| Scientific literature | PR32/32/ 323/324/ 325/326 | F | F | F | F | Р | | | | F |
| CLO1 | | Х | Х | Х | Х | Х | | | | Х |
| CLO2 | | Х | | | Х | Х | | | | Х |
| CLO3 | | Х | | | Х | Х | | | | Х |
| CLO4 | | Х | | | Х | Х | | | | Х |
| CLO5 | | Х | Х | Х | Х | Х | | | | Х |
| Removable prosthodontics: complete dentures | PR355 | F | F | F | F | Р | F | | | F |
| CLO1 | | Х | Х | Х | | | Х | | | Х |
| CLO2 | | Х | Х | X | X | | Х | | | Х |
| CLO3 | | Х | Х | Х | Х | Х | Х | | | Х |
| CLO4 | | | Х | Х | Х | Х | Х | | | Х |
| CLO5 | | Х | Х | Х | Х | Х | Х | | | Х |
| CL06 | | Х | Х | Х | Х | | Х | | | |
| CL07 | | Х | Х | Х | Х | | Х | | | |
| Periodontics and Endodontics for Prosthodontic Specialists | PR365 | Р | Р | Р | Р | Р | F | | | F |
| CLO1 | | Х | Х | Х | Х | Х | Х | | | Х |
| CLO2 | | Х | | | | | Х | | | Х |
| CLO3 | | Х | Х | Х | Х | Х | Х | | | Х |
| CLO4 | | Х | Х | | | | Х | | | Х |
| CLO5 | | Х | Х | Х | Х | Х | Х | | | Х |
| CL06 | | Х | Х | | Х | | Х | | | Х |
| CL07 | | Х | Х | | Х | | Х | | | Х |
| CL08 | | Х | Х | | Х | | Х | | | Х |
| CL09 | | Х | Х | Х | | | Х | | | Х |



| Specialty Clinical Training - Clinic | PR332/333/ 334/335/336 | F | F | F | F | Р | F | F | F | F | F |
|--|---------------------------|---|---|---|---|---|---|---|---|---|---|
| CLO1 | | Х | Х | Х | Х | Х | Х | | Х | Х | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | | Х | Х | Х |
| CLO3 | | Х | Х | | Х | | Х | | Х | Х | Х |
| CLO4 | | Х | Х | Х | Х | Х | Х | | Х | Х | Х |
| CLO5 | | Х | Х | Х | Х | | Х | | Х | | |
| CLO6 | | Х | Х | Х | Х | Х | Х | | Х | Х | Х |
| CL07 | | Х | Х | Х | Х | Х | | Х | Х | | Х |
| Research dissertation | PR312/313/ 314/315/316 | F | Р | Р | F | Р | | | | | F |
| CL01 | | | Х | Х | Х | Х | | | | | Х |
| CLO2 | | | Х | Х | Х | Х | | | | | Х |
| CLO3 | | | Х | Х | Х | Х | | | | | Х |
| CLO4 | | | Х | Х | Х | Х | | | | | Х |
| CLO5 | | | Х | Х | Х | Х | | | | | Х |
| CLO6 | | | Х | Х | Х | Х | | | | | Х |
| CL07 | | | Х | Х | Х | Х | | | | | Х |
| CL08 | | | Х | Х | Х | Х | | | | | Х |
| CLO9 | | | Х | Х | Х | Х | | | | | Х |
| CL010 | | | Х | Х | Х | Х | | | | | Х |
| Esthetics and Digital Dentistry | PR368 | F | Р | F | F | Р | F | | | F | F |
| CLO1 | | Х | Х | | | Х | | | Х | | |
| CLO2 | | | Х | Х | Х | Х | | | | Х | Х |
| CLO3 | | Х | | Х | | | Х | Х | Х | | Х |
| CLO4 | | Х | | Х | | Х | Х | | | Х | |
| CLO5 | | | Х | | Х | | Х | Х | Х | Х | |
| Removable prosthodontics: Partial dentures | PR354 | F | F | F | F | Р | | | | | F |
| CLO1 | | Х | Х | Х | Х | Х | | | | | Х |
| CLO2 | | Х | Х | Х | Х | Х | | | | | Х |
| CLO3 | | Х | Х | Х | Х | Х | | | | | Х |
| CLO4 | | Х | Х | | Х | Х | | | | | Х |
| CLO5 | | Х | Х | Х | Х | | | | | | Х |
| Basic Implant Surgical and Restorative Techniques | PR351 | F | F | F | F | Р | F | | | | F |
| CLO1 | | Х | Х | | | | Х | | | | |
| CLO2 | | Х | Х | Х | | | | | | | Х |
| CLO3 | | Х | Х | Х | | | | | | | Х |
| CLO4 | | Х | | Х | Х | Х | Х | | | | Х |
| CLO5 | | Х | Х | | Х | Х | | | | | Х |



| Dental Biomaterials | PR347 | F | F | F | F | Р | | | F |
|---|-------|---|---|---|---|---|---|--|---|
| CL01 | | Х | Х | Х | Х | | | | Х |
| CLO2 | | Х | Х | Х | Х | | | | Х |
| CLO3 | | Х | Х | Х | Х | | | | Х |
| CLO4 | | Х | Х | Х | Х | Х | | | Х |
| CLO5 | | Х | Х | Х | | Х | | | Х |
| CL06 | | Х | | | Х | Х | | | Х |
| Medical problems relevant to prosthodontics | PR361 | F | F | F | F | Р | F | | F |
| CL01 | | Х | Х | Х | Х | | Х | | Х |
| CLO2 | | Х | Х | Х | Х | | Х | | Х |
| CLO3 | | Х | Х | Х | Х | Х | Х | | Х |
| CLO4 | | Х | Х | Х | Х | Х | Х | | Х |
| Advanced Implant Surgical and Restorative Techniques | PR352 | F | F | F | F | Р | F | | F |
| CL01 | | Х | Х | Х | Х | Х | Х | | Х |
| CLO2 | | Х | Х | Х | Х | Х | Х | | Х |
| CLO3 | | Х | Х | Х | Х | Х | Х | | Х |
| CLO4 | | Х | Х | Х | Х | | Х | | Х |
| Consolidation of Prosthodontic Training | PR364 | F | Р | F | F | | | | F |
| CL01 | | Х | | Х | Х | | | | Х |
| CLO2 | | Х | Х | Х | Х | | | | Х |
| CLO3 | | Х | | | Х | | | | Х |
| CLO4 | | Х | Х | Х | Х | | | | Х |
| CLO5 | | Х | | | | | | | Х |
| CL06 | | Х | | Х | Х | | | | Х |

Decide how much a course contributes to the overall program outcomes

Fully (F) Partly (P)



17.4. Program/Course Level Assessment Rubrics

Semester Cohort to be Assessed: 2022 - 2023

17.4.1. Endodontics - Assessment Rubrics

Sampling Method (Direct or Indirect):

Direct Assessment: Written exams, Portfolio, Assignment, Oral exams and Dissertation Evaluations: Student, Faculty, Practice Assessors and External Examiner Report Indirect: Advisory Group, Employers, Graduates clinical role/Promotion, Applications and Quality of recruits to program

Desired Result Benchmark:

80% of students achieve greater than C in all graded course work.

80% of students achieve a Pass grade in Research Dissertation.

100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.

100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.

100% of students obtain a "pass" on case-based presentations.

80% of students pass oral clinical exam on first attempt.

Summative Response: If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy.

PLO - A1. A systematic understanding of knowledge within and directly related to the specialty, and a critical awareness of current problems and new insights at the forefront of the field of study and area of professional practice.

| CLO | Assessm ent Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|----------------------------|--|-------------------------------|---|-------|--|
| CC510 | Written exam | CC509 | Written exam Quizzes Presentation Seminar Technique | EN821/822/823/ 824/825/826 | Critique of literature Oral presentation | EN852 | Presentation and journal club write up, Written exam |
| CC503 | Written exam | CC504 | Written exam Assignment | EN837/838/839 | Logbook WBA 360° MSF | EN854 | Written exam Oral exam |
| CC502 | Written exam Assignment | EN841 | Written exam Presentation & Journal club write up | EN843 | Written exam Presentation Journal club write up | EN849 | Written exam Practical Case discussion (oral) |
| CC511 | Written exam | EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN844 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam |
| CC508 | Written exam Presentation Assignment | EN812/813/ 814/ 815/816 | Thesis Dissertation | EN846 | Written exam Presentation Journal club write up | EN853 | Written exam Oral exam Hand in of 20 fully referenced clinical cases |



PLO - A2. A comprehensive understanding of techniques applicable to the clinical practice and their own research.

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|-------|---|-------------------------------|--|-------|---|-------|--|
| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
| CC503 | Written exam | EN841 | Written exam Presentation & Journal club write up | EN843 | Written exam Presentation Journal club write up | EN849 | Written exam Practical Case discussion (oral) |
| CC502 | Written exam Assignment | EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN844 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam |
| CC508 | Written exam Presentation Assignment | EN812/813/ 814/ 815/816 | Thesis Dissertation | EN846 | Written exam Presentation Journal club write up | EN853 | Written exam Oral exam Hand in of 20 fully referenced clinical cases |
| CC509 | Written exam Quizzes Presentation Seminar Technique | EN821/822/823/ 824/825/826 | Critique of literature Oral presentation | EN852 | Presentation and journal club write up, Written exam | | |
| CC504 | Written exam Assignment | EN837/838/839 | Logbook WBA 360° MSF | EN854 | Written exam Oral exam | | |



PLO - A3. Originality in the application of clinical and scientific knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|---------------|---|-------|--|
| CC510 | Written exam | CC504 | Written exam Assignment | EN837/838/839 | Logbook WBA 360° MSF | EN854 | Written exam Oral exam |
| CC502 | Written exam Assignment | EN841 | Written exam Presentation & Journal club write up | EN843 | Written exam Presentation Journal club write up | EN849 | Written exam Practical Case discussion (oral) |
| CC511 | Written exam | EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN844 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam |
| CC508 | Written exam Presentation Assignment | EN812/813/ 814/815/816 | Thesis Dissertation | EN846 | Written exam Presentation Journal club write up | EN853 | Written exam Oral exam Hand in of 20 fully referenced clinical cases |
| CC509 | Written exam Quizzes Presentation Seminar Technique | EN821/822/823/ 824/825/826 | Critique of literature Oral presentation | EN852 | Presentation and journal club write up, Written exam | | |



PLO - B1. Evaluate critically current research and advanced scholarship in the discipline.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|---|-------|---|
| CC502 | Written exam Assignment | EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN844 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam |
| CC508 | Written exam Presentation Assignment | EN812/813/814/ 815/816 | Thesis Dissertation | EN846 | Written exam Presentation Journal club write up | EN853 | Written exam Oral exam Hand in of 20 fully referenced clinical cases |
| CC509 | Written exam Quizzes Presentation Seminar Technique | EN821/822/823/ 824/825/826 | Critique of literature Oral presentation | EN852 | Presentation and journal club write up, Written exam | EN849 | Written exam Practical Case discussion (oral) |
| CC504 | Written exam Assignment | EN837/838/839 | Logbook WBA 360° MSF | EN854 | Written exam Oral exam | EN843 | Written exam Presentation Journal club write up |
| EN841 | Written exam Presentation & Journal club write up | | | | | | |



PLO - B2. Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses

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|-------|---|-------------------------------|---|-------|---|-------|--|
| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
| CC502 | Written exam Assignment | EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN844 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam |
| CC508 | Written exam Presentation Assignment | EN812/813/ 814/ 815/816 | Thesis Dissertation | EN846 | Written exam Presentation Journal club write up | EN853 | Written exam Oral exam Hand in of 20 fully referenced clinical cases |
| CC509 | Written exam Quizzes Presentation Seminar Technique | EN821/822/823/ 824/825/826 | Critique of literature Oral presentation | EN852 | Presentation and journal club write up, Written exam | EN849 | Written exam Practical Case discussion (oral) |
| CC504 | Written exam Assignment | EN837/838/839 | Logbook WBA 360° MSF | EN854 | Written exam Oral exam | EN843 | Written exam Presentation Journal club write up |
| EN841 | Written exam Presentation & Journal club write up | | | | | | |



PLO - B3. Synthesize clinical findings to make a diagnosis and treatment plan or plan patient follow-up and appreciate their limitations and to take advice or refer a patient when appropriate

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|--|-------------------------------|---|-------|---|-------|---|
| CC510 | Written exam | EN841 | Written exam Presentation & Journal club write up | EN843 | Written exam Presentation Journal club write up | EN854 | Written exam Oral exam |
| CC503 | Written exam | EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN844 | Written exam Presentation Journal club write up | EN849 | Written exam Practical Case discussion (oral) |
| CC511 | Written exam | EN821/822/823/ 824/825/826 | Critique of literature Oral presentation | EN846 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam |
| EN853 | Written exam Oral exam Hand in of 20 fully referenced clinical cases | EN837/838/839 | Logbook WBA 360° MSF | EN852 | Presentation and journal club write up, Written exam | | |



PLO - B4. Provide treatment for patients with moderate to difficult requirements.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessmen t Tool |
|-------|---|-------|--|-------|--|-------------------------------|---|
| CC509 | Written exam Quizzes Presentation Seminar Technique | EN843 | Written exam Presentation Journal club write up | EN854 | Written exam Oral exam | EN821/822/823 /824/825/826 | Critique of literature Oral presentation |
| CC504 | Written exam Assignment | EN844 | Written exam Presentation Journal club write up | EN849 | Written exam Practical Case discussion (oral) | EN837/838/839 | Logbook WBA 360° MSF |
| EN841 | Written exam Presentation & Journal club write up | EN846 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam | EN852 | Presentation and journal club write up, Written exam |
| EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN853 | Written exam Oral exam Hand in of 20 fully referenced clinical cases | | | | |



PLO - C1. Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|---------------------------|---|-------|---|-------|--|
| CC503 | Written exam | EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN843 | Written exam Presentation Journal club write up | EN854 | Written exam Oral exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | EN812/813/814/ 815/816 | Thesis Dissertation | EN844 | Written exam Presentation Journal club write up | EN849 | Written exam Practical Case discussion (oral) |
| CC504 | Written exam Assignment | EN821/822/823/824/825/826 | Critique of literature Oral presentation | EN846 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam |
| EN841 | Written exam Presentation & Journal club write up | EN837/838/839 | Logbook WBA 360° MSF | EN852 | Presentation and journal club write up, Written exam | EN853 | Written exam Oral exam Hand in of 20 fully referenced clinical cases |



| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessm ent Tool |
|-------|---|---------------------------|--|-------|---|-------|---|
| CC503 | Written exam | EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN843 | Written exam Presentation Journal club write up | EN854 | Written exam Oral exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | EN812/813/814/815/816 | Thesis Dissertation | EN844 | Written exam Presentation Journal club write up | EN849 | Written exam Practical Case discussio n (oral) |
| CC504 | Written exam Assignment | EN821/822/823/824/825/826 | Critique of literature Oral presentation | EN846 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam |
| EN841 | Written exam Presentation & Journal club write up | EN837/838/839 | Logbook WBA 360° MSF | EN852 | Presentation and journal club write up, Written exam | EN853 | Written exam Oral exam Hand in of 20 fully reference d clinical cases |



PLO - C3. Appreciate that evidence-based practice underpins patient care.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|--|-------------------------------|--|---------------|--|-------|---|
| CC502 | Written exam Assignment | EN841 | Written exam Presentation & Journal club write up | EN837/838/839 | Logbook WBA 360° MSF | EN852 | Presentation and journal club write up, Written exam |
| CC508 | Written exam Presentation Assignment | EN842 | Written exam Practical exam Case Presentation (oral) Logbook | EN843 | Written exam Presentation Journal club write up | EN854 | Written exam Oral exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | EN812/813/ 814/815/816 | Thesis Dissertation | EN844 | Written exam Presentation Journal club write up | EN849 | Written exam Practical Case discussion (oral) |
| CC504 | Written exam Assignment | EN821/822/823/ 824/825/826 | Critique of literature Oral presentation | EN846 | Written exam Presentation Journal club write up | EN850 | Written exam Oral exam |
| EN853 | Written exam Oral exam Hand in of 20 fully referenced clinical cases | | | | | | |



17.4.2. Orthodontics – Assessment Rubrics Sampling Method (Direct or Indirect):

Direct Assessment: Written exams, Portfolio, Assignment, Oral exams and Dissertation Evaluations: Student, Faculty, Practice Assessors, and External Examiner Report Indirect: Advisory Group, Employers, Graduates clinical role/Promotion, Applications and Quality of recruits to program

Desired Result Benchmark:

80% of students achieve greater than C in all graded course work.

80% of students achieve a Pass grade in Research Dissertation.

100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.

100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.

100% of students obtain a "pass" on case-based presentations.

80% of students pass oral clinical exam on first attempt.

Summative Response: If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy.

PLO - A1. A systematic understanding of knowledge within and directly related to the specialty, and a critical awareness of current problems and new insights at the forefront of the field of study and area of professional practice.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|---|-------|---|-------------------------------|---|
| CC510 | Written exam | CC503 | Written exam | OR656 | Written exam Quizzes Presentation | OR652 | Written exam Quizzes Presentation |
| CC502 | Written exam Assignment | CC511 | Written exam | OR657 | Written exam Quizzes Presentation | PR366 | Written exam Presentation |
| CC504 | Written exam Assignment | OR637/638/639 | Logbook WBA 360° MSF | OR658 | Written exam Quizzes Presentation | OR653 | Written exam Quizzes Presentation |
| CC508 | Written exam Presentation Assignment | OR621/622/623/ 624/625/626 | Presentation Critique of literature Presentation | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | OR643 | Quizzes Presentation and assignments Written exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | OR644 | Quizzes Presentation and assignments Written exam | OR650 | Written exam Quizzes Presentation | OR611/612/613 /614/615/616 | Thesis Dissertation |
| OR641 | Practical test Quizzes | OR642 | Written exam Quizzes | OR655 | Written exam Quizzes Presentation | OR647 | Written exam Quizzes Presentation |
| OR648 | Written exam Quizzes Presentation | | | | | | |



PLO - A2 A comprehensive understanding of techniques applicable to the clinical practice and their own research.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|---|-------|---|-------|--|
| CC503 | Written exam | OR621/622/623/ 624/625/626 | Presentation Critique of literature Presentation | OR658 | Written exam Quizzes Presentation | OR642 | Written exam Quizzes |
| CC509 | Written exam Quizzes Presentation Seminar Technique | OR637/638/639 | Logbook WBA 360° MSF | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | OR643 | Quizzes Presentation and assignments Written exam |
| CC508 | Written exam Presentation Assignment | OR611/612/613/ 614/615/616 | Thesis Dissertation | PR366 | Written exam Presentation | OR644 | Quizzes Presentation and assignments Written exam |
| CC502 | Written exam Assignment | OR656 | Written exam Quizzes Presentation | OR655 | Written exam Quizzes Presentation | OR647 | Written exam Quizzes Presentation |
| CC504 | Written exam Assignment | OR657 | Written exam Quizzes Presentation | OR641 | Practical test Quizzes | OR648 | Written exam Quizzes Presentation |
| OR650 | Written exam Quizzes Presentation | OR652 | Written exam Quizzes Presentation | OR653 | Written exam Quizzes Presentation | | |



PLO - A3. Originality in the application of clinical and scientific knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|---|-------|--|-------|---|
| CC510 | Written exam | OR621/622/623/ 624/625/626 | Presentation Critique of literature Presentation | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | OR644 | Quizzes Presentation and assignments Written exam |
| CC502 | Written exam Assignment | OR637/638/639 | Logbook WBA 360° MSF | PR366 | Written exam Presentation | OR647 | Written exam Quizzes Presentation |
| CC511 | Written exam | OR611/612/613/ 614/615/616 | Thesis Dissertation | OR655 | Written exam Quizzes Presentation | OR648 | Written exam Quizzes Presentation |
| CC508 | Written exam Presentation Assignment | OR656 | Written exam Quizzes Presentation | OR641 | Practical test Quizzes | OR650 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | OR657 | Written exam Quizzes Presentation | OR643 | Quizzes Presentation and assignments Written exam | OR642 | Written exam Quizzes |
| CC504 | Written exam Assignment | OR658 | Written exam Quizzes Presentation | OR652 | Written exam Quizzes Presentation | OR653 | Written exam Quizzes Presentation |



PLO - B1. Evaluate critically current research and advanced scholarship in the discipline.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|---------------|---|-------|---|-------------------------------|---|-------|---|
| CC502 | Written exam Assignment | OR655 | Written exam Quizzes Presentation | OR611/612/613 /614/615/616 | Thesis Dissertation | OR647 | Written exam |
| CC508 | Written exam Presentation Assignment | OR656 | Written exam Quizzes Presentation | OR621/622/623 /624/625/626 | Presentation Critique of literature Presentation | OR648 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | OR643 | Quizzes Presentation and assignments Written exam | OR652 | Written exam Quizzes Presentation |
| CC504 | Written exam Assignment | PR366 | Written exam Presentation | OR644 | Quizzes Presentation and assignments Written exam | OR653 | Written exam Quizzes Presentation |
| OR642 | Written exam Quizzes | OR648 | Written exam Quizzes Presentation | OR647 | Written exam Quizzes Presentation | | |
| OR637/638/639 | Logbook WBA 360° MSF | | | | | | |



PLO - B2. Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|---|-------|--|
| CC502 | Written exam Assignment | OR621/622/623/ 624/625/626 | Presentation Critique of literature Presentation | OR647 | Written exam Quizzes Presentation | OR655 | Written exam Quizzes Presentation |
| CC508 | Written exam Presentation Assignment | OR637/638/639 | Logbook WBA 360° MSF | OR644 | Quizzes Presentation and assignments Written exam | OR642 | Written exam Quizzes |
| CC509 | Written exam Quizzes Presentation Seminar Technique | OR611/612/613/ 614/615/616 | Thesis Dissertation | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | OR643 | Quizzes Presentation and assignments Written exam |
| CC504 | Written exam Assignment | OR656 | Written exam Quizzes Presentation | PR366 | Written exam Presentation | | |



PLO - B3. Synthesize clinical findings to make a diagnosis and treatment plan or plan patient follow-up and appreciate their limitations and to take advice or refer a patient when appropriate

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------------------------------|---|---------------|---|-------|---|-------|--|
| CC510 | Written exam | OR637/638/639 | Logbook WBA 360° MSF | OR658 | Written exam Quizzes Presentation | OR648 | Written exam Quizzes Presentation |
| CC503 | Written exam | OR655 | Written exam Quizzes Presentation | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | OR650 | Written exam Quizzes Presentation |
| CC511 | Written exam | OR656 | Written exam Quizzes Presentation | OR641 | Practical test Quizzes | OR652 | Written exam Quizzes Presentation |
| OR621/622/623/ 624/625/626 | Presentation Critique of literature Presentation | OR657 | Written exam Quizzes Presentation | OR647 | Written exam Quizzes Presentation | OR653 | Written exam Quizzes Presentation |



PLO - B4. Provide treatment for patients with moderate to difficult requirements.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|---------------------------|---|-------|---|-------|--|-------|--|
| CC509 | Written exam Quizzes Presentation Seminar Technique | OR656 | Written exam Quizzes Presentation | OR641 | Practical test Quizzes | OR648 | Written exam Quizzes Presentation |
| CC504 | Written exam Assignment | OR657 | Written exam Quizzes Presentation | OR642 | Written exam Quizzes | OR650 | Written exam Quizzes Presentation |
| OR621/622/623/624/625/626 | Presentation Critique of literature Presentation | OR658 | Written exam Quizzes Presentation | OR643 | Quizzes Presentation and assignments Written exam | OR652 | Written exam Quizzes Presentation |
| OR637/638/639 | Logbook WBA 360° MSF | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | OR644 | Quizzes Presentation and assignments Written exam | OR653 | Written exam Quizzes Presentation |
| OR655 | Written exam Quizzes Presentation | PR366 | Written exam Presentation | OR647 | Written exam Quizzes Presentation | | |



PLO - C1. Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------------------------------|---|-------|---|-------|---|-------|--|
| CC503 | Written exam | OR650 | Written exam Quizzes Presentation | PR366 | Written exam Presentation | OR652 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | OR644 | Quizzes Presentation and assignments Written exam | OR653 | Written exam Quizzes Presentation | OR647 | Written exam Quizzes Presentation |
| CC504 | Written exam Assignment | OR657 | Written exam Quizzes Presentation | OR641 | Practical test Quizzes | | |
| OR621/622/623/ 624/625/626 | Presentation Critique of literature Presentation | OR658 | Written exam Quizzes Presentation | OR642 | Written exam Quizzes | | |
| OR637/638/639 | Logbook WBA 360° MSF | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | OR643 | Quizzes Presentation and assignments Written exam | | |
| OR611/612/613/ 614/615/616 | Thesis Dissertation | | | | | | |



| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessme nt Tool | CLO | Assessme nt Tool |
|-------------------------------|---|---------------|---|-------------------------------|-------------------------------------|-------|----------------------------|
| CC503 | Written exam | OR653 | Written exam Quizzes Presentation | PR366 | Written exam Presentati on | OR642 | Written exam Quizzes |
| CC509 | Written exam Quizzes Presentation Seminar Technique | OR643 | Quizzes Presentation and assignments Written exam | OR611/612/613/ 614/615/616 | Thesis Dissertatio n | | |
| CC504 | Written exam Assignment | OR637/638/639 | Logbook WBA 360° MSF | OR641 | Practical test Quizzes | | |
| OR621/622/623 /624/625/626 | Presentation Critique of literature Presentation | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | | | | |



PLO - C3. Appreciate that evidence-based practice underpins patient care.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|---|-------|---|-------|---|
| CC502 | Written exam Assignment | OR637/638/639 | Logbook WBA 360° MSF | OR659 | Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination | OR643 | Quizzes Presentation and assignments Written exam |
| CC508 | Written exam Presentation Assignment | OR611/612/613/ 614/615/616 | Thesis Dissertation | PR366 | Written exam Presentation | OR647 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | OR621/622/623/ 624/625/626 | Presentation Critique of literature Presentation | OR656 | Written exam Quizzes Presentation | OR644 | Quizzes Presentation and assignments Written exam |
| CC504 | Written exam Assignment | OR657 | Written exam Quizzes Presentation | OR641 | Practical test Quizzes | OR648 | Written exam Quizzes Presentation |
| OR655 | Written exam Quizzes Presentation | OR658 | Written exam Quizzes Presentation | OR642 | Written exam Quizzes | OR652 | Written exam Quizzes Presentation |
| OR653 | Written exam Quizzes Presentation | | | | | | |



17.4.3. Pediatric Dentistry - Assessment Rubrics

Sampling Method (Direct or Indirect):

Direct Assessment: Written exams, Portfolio, Assignment, Oral exams and Dissertation Evaluations: Student, Faculty, Practice Assessors and External Examiner Report Indirect: Advisory Group, Employers, Graduates clinical role/Promotion, Applications and Quality of recruits to program

Desired Result Benchmark:

80% of students achieve greater than C in all graded course work.

80% of students achieve a Pass grade in Research Dissertation.

100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.

100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.

100% of students obtain a "pass" on case-based presentations.

80% of students pass oral clinical exam on first attempt.

Summative Response: If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy.



PLO - A1. A systematic understanding of knowledge within and directly related to the specialty, and a critical awareness of current problems and new insights at the forefront of the field of study and area of professional practice.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|--|-------------------------------|--|-------------------------------|--|-----------|---|
| CC510 | Written exam | CC509 | Written exam Quizzes Presentation Seminar Technique | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD445 | Written exam Quizzes Presentation |
| CC503 | Written exam | CC504 | Written exam Assignment | PD411/412/413 /414/415/416 | Thesis Dissertation | PD450 | Written exam |
| CC502 | Written exam Assignment | PD441 | Written exam Quizzes | OR643 | Written exam Presentation Quizzes | PD451 | Written exam Quizzes Presentation |
| CC511 | Written exam | PD442 | Written exam Quizzes | PD443 | Written exam Quizzes Presentation | PD448 | Written exam Quizzes Presentation |
| CC508 | Written exam Presentation Assignment | PD421/422/423 /424/425/426 | Presentation | PD446 | Written exam Quizzes Presentation | PD454/455 | Written exam Quizzes Presentation Governance project |
| PD444 | Written exam Quizzes Presentation | | | | | | |



PLO - A2 A comprehensive understanding of techniques applicable to the clinical practice and their own research.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|---|-----------|--|
| CC503 | Written exam | PD441 | Written exam Quizzes | OR643 | Written exam Presentation Quizzes | PD450 | Written exam |
| CC502 | Written exam Assignment | PD442 | Written exam Quizzes | PD443 | Written exam Quizzes Presentation | PD451 | Written exam Quizzes Presentation |
| CC508 | Written exam Presentation Assignment | PD421/422/423/ 424/425/426 | Presentation | PD444 | Written exam Quizzes Presentation | PD448 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD446 | Written exam Quizzes Presentation | PD454/455 | Written exam Quizzes Presentation Governance project |
| CC504 | Written exam Assignment | PD411/412/413/ 414/415/416 | Thesis Dissertation | PD445 | Written exam Quizzes Presentation | | |



PLO - A3. Originality in the application of clinical and scientific knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------------------------------|--|---------------|---|
| CC510 | Written exam | CC504 | Written exam Assignment | PD411/412/413 /414/415/416 | Thesis Dissertation | PD445 | Written exam Quizzes Presentation |
| CC502 | Written exam Assignment | PD441 | Written exam Quizzes | OR643 | Written exam Presentation Quizzes | PD450 | Written exam |
| CC511 | Written exam | PD442 | Written exam Quizzes | PD443 | Written exam Quizzes Presentation | PD451 | Written exam Quizzes Presentation |
| CC508 | Written exam Presentation Assignment | PD421/422/ 423/424/425/426 | Presentation | PD444 | Written exam Quizzes Presentation | PD448 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD446 | Written exam Quizzes Presentation | PD454/ 455 | Written exam Quizzes Presentation Governance project |



PLO - B1. Evaluate critically current research and advanced scholarship in the discipline.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|---|---------------|--|
| CC502 | Written exam Assignment | PD442 | Written exam Quizzes | OR643 | Written exam Presentation Quizzes | PD451 | Written exam Quizzes Presentation |
| CC508 | Written exam Presentation Assignment | PD421/422/423/ 424/425/426 | Presentation | PD444 | Written exam Quizzes Presentation | PD448 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD446 | Written exam Quizzes Presentation | PD454/ 455 | Written exam Quizzes Presentation Governance project |
| CC504 | Written exam Assignment | PD411/412/413/ 414/415/416 | Thesis Dissertation | PD445 | Written exam Quizzes Presentation | PD450 | Written exam |
| PD441 | Written exam Quizzes | | | | | | |



PLO - B2. Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|---|-------|--|-----------|--|
| CC502 | Written exam Assignment | PD442 | Written exam Quizzes | PD450 | Written exam | PD451 | Written exam Quizzes Presentation |
| CC508 | Written exam Presentation Assignment | PD421/422/423/ 424/425/426 | Presentation | PD444 | Written exam Quizzes Presentation | PD448 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD446 | Written exam Quizzes Presentation | PD454/455 | Written exam Quizzes Presentation Governance project |
| CC504 | Written exam Assignment | PD411/412/413/ 414/415/416 | Thesis Dissertation | PD445 | Written exam Quizzes Presentation | OR643 | Written exam Presentation Quizzes |
| PD441 | Written exam Quizzes | | | | | | |



PLO - B3. Synthesize clinical findings to make a diagnosis and treatment plan or plan patient follow-up and appreciate their limitations and to take advice or refer a patient when appropriate

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|-------------------------|---------------------------|---|-------|--|-----------|---|
| CC510 | Written exam | PD421/422/423/424/425/426 | Presentation | PD444 | Written exam Quizzes Presentation | PD448 | Written exam Quizzes Presentation |
| CC503 | Written exam | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD446 | Written exam Quizzes Presentation | PD454/455 | Written exam Quizzes Presentation Governance project |
| CC511 | Written exam | PD411/412/413/414/415/416 | Thesis Dissertation | PD445 | Written exam Quizzes Presentation | PD443 | Written exam Quizzes Presentation |
| PD441 | Written exam Quizzes | PD442 | Written exam Quizzes | PD450 | Written exam | PD451 | Written exam Quizzes Presentation |



PLO - B4. Provide treatment for patients with moderate to difficult requirements.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|---|-----------|--|
| CC509 | Written exam Quizzes Presentation Seminar Technique | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD445 | Written exam Quizzes Presentation | PD446 | Written exam Quizzes Presentation |
| CC504 | Written exam Assignment | OR643 | Written exam Presentation Quizzes | PD450 | Written exam | PD444 | Written exam Quizzes Presentation |
| PD441 | Written exam Quizzes | PD443 | Written exam Quizzes Presentation | PD451 | Written exam Quizzes Presentation | PD454/455 | Written exam Quizzes Presentation Governance project |
| PD442 | Written exam Quizzes | PD421/422/423 /424/425/426 | Presentation | PD448 | Written exam Quizzes Presentation | | |



PLO - C1. Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|---|-------|--|-----------|--|
| CC503 | Written exam | PD421/422/423/ 424/425/426 | Presentation | PD444 | Written exam Quizzes Presentation | PD448 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD446 | Written exam Quizzes Presentation | PD454/455 | Written exam Quizzes Presentation Governance project |
| CC504 | Written exam Assignment | PD411/412/413/ 414/415/416 | Thesis Dissertation | PD445 | Written exam Quizzes Presentation | PD443 | Written exam Quizzes Presentation |
| PD441 | Written exam Quizzes | OR643 | Written exam Presentation Quizzes | PD450 | Written exam | PD451 | Written exam Quizzes Presentation |
| PD442 | Written exam Quizzes | | | | | | |



| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|---|-----------|--|
| CC503 | Written exam | PD421/422/423/ 424/425/426 | Presentation | PD444 | Written exam Quizzes Presentation | PD448 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD446 | Written exam Quizzes Presentation | PD454/455 | Written exam Quizzes Presentation Governance project |
| CC504 | Written exam Assignment | PD411/412/413/ 414/415/416 | Thesis Dissertation | PD445 | Written exam Quizzes Presentation | PD443 | Written exam Quizzes Presentation |
| PD441 | Written exam Quizzes | OR643 | Written exam Presentation Quizzes | PD450 | Written exam | PD451 | Written exam Quizzes Presentation |
| PD442 | Written exam Quizzes | | | | | | |



PLO - C3. Appreciate that evidence-based practice underpins patient care.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|---|-------|---|-----------|---|
| CC502 | Written exam Assignment | PD442 | Written exam Quizzes | PD443 | Written exam Quizzes Presentation | PD451 | Written exam Quizzes Presentation |
| CC508 | Written exam Presentation Assignment | PD421/422/423 /424/425/426 | Presentation | PD444 | Written exam Quizzes Presentation | PD448 | Written exam Quizzes Presentation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PD437/438/439 | Oral Exam Logbook WBA Case Presentation 360° multisource feedback | PD446 | Written exam Quizzes Presentation | PD454/455 | Written exam Quizzes Presentation Governance project |
| CC504 | Written exam Assignment | PD411/412/413/ 414/415/416 | Thesis Dissertation | PD445 | Written exam Quizzes Presentation | OR643 | Written exam Presentation Quizzes |
| PD441 | Written exam Quizzes | PD450 | Written exam | | | | |



17.4.4. Periodontology – Assessment Rubrics Sampling Method (Direct or Indirect):

Direct Assessment: Written exams, Portfolio, Assignment, Oral exams and Dissertation Evaluations: Student, Faculty, Practice Assessors and External Examiner Report Indirect: Advisory Group, Employers, Graduates clinical role/Promotion, Applications and Quality of recruits to program

Desired Result Benchmark:

80% of students achieve greater than C in all graded course work.

80% of students achieve a Pass grade in Research Dissertation.

100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.

100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.

100% of students obtain a "pass" on case-based presentations.

80% of students pass oral clinical exam on first attempt.

Summative Response: If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy.

PLO - A1. A systematic understanding of knowledge within and directly related to the specialty, and a critical awareness of current problems and new insights at the forefront of the field of study and area of professional practice.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|--|-------|---|-------------------------------|--|-------|--|
| CC510 | Written exam | CC509 | Written exam Quizzes Presentation Seminar Technique | PE221/222/223 224/225/226 | Journal club Case presentation Essay assignment/prese ntation | PE259 | Written exam Oral examination Reflective writing |
| CC503 | Written exam | CC504 | Written exam Assignment | PE237/238/239 | Competency forms Oral examination Community service Logbook | PR351 | Written exam |
| CC502 | Written exam Assignment | PE241 | Written exam | PE211/212/213/ 214/215/216 | Thesis Dissertation | PR352 | Written exam |
| CC511 | Written exam | PE246 | Written exam | PE243 | Written exam | PE250 | Written exam |
| CC508 | Written exam Presentation Assignment | PE256 | Written exam | PE244 | Written exam | PE249 | Written exam |



PLO - A2. A comprehensive understanding of techniques applicable to the clinical practice and their own research.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|--------------------|-------|--|
| CC502 | Written exam Assignment | PE237/238/239 | Competency forms Oral examination Community service Logbook | PE243 | Written exam | PE250 | Written exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PE211/212/213/ 214/215/216 | Thesis Dissertation | PE244 | Written exam | PE259 | Written exam Oral examination Reflective writing |
| CC508 | Written exam Presentation Assignment | PE221/222/223 224/225/226 | Journal club Case presentation Essay assignment/ presentation | PE249 | Written exam | CC510 | Written exam |
| CC504 | Written exam Assignment | PR352 | Written exam | PR351 | Written exam | PE246 | Written exam |
| PE256 | Written exam | PE241 | Written exam | | | | |



PLO - A3. Originality in the application of clinical and scientific knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|--------------------|-------|--|
| CC511 | Written exam | PE246 | Written exam | PE243 | Written exam | PE250 | Written exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PE211/212/213/ 214/215/216 | Thesis Dissertation | PE244 | Written exam | PE259 | Written exam Oral examination Reflective writing |
| CC508 | Written exam Presentation Assignment | PE221/222/223 224/225/226 | Journal club Case presentation Essay assignment/ presentation | PE249 | Written exam | PR352 | Written exam |
| CC504 | Written exam Assignment | PE237/238/239 | Competency forms Oral examination Community service Logbook | PR351 | Written exam | PE256 | Written exam |
| CC502 | Written exam Assignment | PE241 | Written exam | | | | |



PLO - B1. Evaluate critically current research and advanced scholarship in the discipline.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|--------------------|-------|--|
| CC504 | Written exam Assignment | PE211/212/213 /214/215/216 | Thesis Dissertation | PE243 | Written exam | PE250 | Written exam |
| CC502 | Written exam Assignment | PE221/222/223 224/225/226 | Journal club Case presentation Essay assignment/ presentation | PE244 | Written exam | PE259 | Written exam Oral examination Reflective writing |
| CC508 | Written exam Presentation Assignment | PE237/238/239 | Competency forms Oral examination Community service Logbook | PE249 | Written exam | PE241 | Written exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PE256 | Written exam | PR351 | Written exam | PR352 | Written exam |
| PE246 | Written exam | | | | | | |



PLO - B2. Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|-----------------|-------------------------------|--|-------|--------------------|-------|--|
| CC510 | Written exam | PE211/212/213 /214/215/216 | Thesis Dissertation | PE244 | Written exam | PE241 | Written exam |
| CC503 | Written exam | PE221/222/223 224/225/226 | Journal club Case presentation Essay assignment/ presentation | PE249 | Written exam | PE259 | Written exam Oral examination Reflective writing |
| CC511 | Written exam | PE237/238/239 | Competency forms Oral examination Community service Logbook | PR351 | Written exam | PE243 | Written exam |
| PE256 | Written exam | PE221/222/223 224/225/226 | Journal club Case presentation Essay assignment/ presentation | PR352 | Written exam | PE250 | Written exam |



PLO - B3. Synthesize clinical findings to make a diagnosis and treatment plan or plan patient follow-up and appreciate their limitations and to take advice or refer a patient when appropriate

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|--|-------|--------------------|
| CC509 | Written exam Quizzes Presentation Seminar Technique | PE231/232/233/ 234/235/236 | Competency forms Oral examination Community service Logbook | PE259 | Written exam Oral examination Reflective writing | PE244 | Written exam |
| CC504 | Written exam Assignment | PE221/222/223 224/225/226 | Journal club Case presentation Essay assignment/ presentation | PE250 | Written exam | PR351 | Written exam |
| PE241 | Written exam | PE237/238/239 | Competency forms Oral examination Community service Logbook | PE246 | Written exam | PR352 | Written exam |
| PE243 | Written exam | PE249 | Written exam | PE256 | Written exam | | |



PLO - B4. Provide treatment for patients with moderate to difficult requirements.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------|--------------------|---------------------------|------------------------|-------|--------------------|
| CC503 | Written exam | PE244 | Written exam | PE256 | Written exam | PE243 | Written exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PE249 | Written exam | PE211/212/213/214/215/216 | Thesis Dissertation | PE250 | Written exam |
| CC504 | Written exam Assignment | PE241 | Written exam | PE246 | Written exam | | |



PLO - C1. Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|--------------------|-------|--------------------|
| CC503 | Written exam | PE221/222/223 224/225/226 | Journal club Case presentation Essay assignment/ presentation | PE244 | Written exam | PE250 | Written exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PE237/238/239 | Competency forms Oral examination Community service Logbook | PE249 | Written exam | PE246 | Written exam |
| CC504 | Written exam Assignment | PE211/212/213 /214/215/216 | Thesis Dissertation | PE243 | Written exam | PE241 | Written exam |



| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------------------------------|--|-------|--------------------|-------|--------------------|
| CC502 | Written exam Assignment | PE237/238/239 | Competency forms Oral examination Community service Logbook | PE249 | Written exam | PE250 | Written exam |
| CC508 | Written exam Presentation Assignment | PE211/212/213 /214/215/216 | Thesis Dissertation | PE241 | Written exam | PE256 | Written exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PE221/222/223 224/225/226 | Journal club Case presentation Essay assignment/ presentation | PE246 | Written exam | PE244 | Written exam |
| CC504 | Written exam Assignment | PE243 | Written exam | | | | |



PLO - C3. Appreciate that evidence-based practice underpins patient care.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|--------------------|---------------|--|-------|--------------------|-------|--|
| PE243 | Written exam | PE237/238/239 | Competency forms Oral examination Community service Logbook | PR351 | Written exam | PE259 | Written exam Oral examination Reflective writing |
| PE244 | Written exam | PE241 | Written exam | PR352 | Written exam | PE250 | Written exam |
| PE249 | Written exam | PE243 | Written exam | PE246 | Written exam | PE256 | Written exam |



17.4.5. Prosthodontics - Assessment Rubrics

Sampling Method (Direct or Indirect):

Direct Assessment: Written exams, Portfolio, Assignment, Oral exams and Dissertation Evaluations: Student, Faculty, Practice Assessors and External Examiner Report Indirect: Advisory Group, Employers, Graduates clinical role/Promotion Applications and Quality of recruits to program

Desired Result Benchmark:

80% of students achieve greater than C in all graded course work.

80% of students achieve a Pass grade in Research Dissertation.

100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.

100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.

100% of students obtain a "pass" on case-based presentations.

80% of students pass oral clinical exam on first attempt.

Summative Response: If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy.



PLO - A1. A systematic understanding of knowledge within and directly related to the specialty, and a critical awareness of current problems and new insights at the forefront of the field of study and area of professional prostices.

of professional practice.

| | professional | praotioe. | | | | | |
|-------|---|-----------|---|-------|--|-------------------------------|---|
| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
| CC510 | Written exam | CC509 | Written exam Quizzes Presentation Seminar Technique | PR355 | Written exam Presentations/se minars | PR331 | Practical Exam Portfolio |
| CC503 | Written exam | CC504 | Written exam Assignment | PR365 | Written exam Oral examination | PR321/322/323 /324/325/326 | Oral examination |
| CC502 | Written exam Assignment | PR366 | Written exam Presentation | PR351 | Written exam | PR312/313/ 314/315/316 | Thesis/dissertatio n |
| CC511 | Written exam | PR367 | Written exam Oral Presentation | PR361 | Written exam Oral examination Presentation | PR354 | Written exam Presentation |
| CC508 | Written exam Presentation Assignment | PR346 | Written exam Oral presentation | PR352 | Written exam | PR332/338/339 | Logbook and reflective learning portfolio WBA, Clinical oral exam |
| PR347 | Written exam Presentation | PR368 | Written exam Oral Examination | PR364 | Oral exam Written exam Reflective writing | | |



PLO - A2. A comprehensive understanding of techniques applicable to the clinical practice and their own research.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------|--|-------|---|-------------------------------|---|
| CC503 | Written exam | PR367 | Written exam Oral Presentation | PR361 | Written exam Oral examination Presentation | PR321/322/323 /324/325/326 | Oral examination |
| CC502 | Written exam Assignment | PR346 | Written exam Oral presentation | PR352 | Written exam | PR312/313/ 314/315/316 | Thesis dissertation |
| CC508 | Written exam Presentation Assignment | PR355 | Written exam Presentations/ seminars | PR331 | Practical Exam Portfolio | PR332/338/339 | Logbook and reflective learning portfolio WBA, Clinical oral exam |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PR365 | Written exam Oral examination | PR354 | Written exam Presentation | PR368 | Written exam Oral Examination |
| CC504 | Written exam Assignment | PR351 | Written exam | PR347 | Written exam Presentation | PR364 | Oral exam Written exam Reflective writing |
| PR366 | Written exam Presentation | | | | | | |



PLO - A3. Originality in the application of clinical and scientific knowledge, together with a practical understanding of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------|--|-------|---|-------------------------------|--|
| CC510 | Written exam | PR366 | Written exam Presentation | PR361 | Written exam Oral examination Presentation | PR321/322/323/ 324/325/326 | Oral examination |
| CC502 | Written exam Assignment | PR367 | Written exam Oral Presentation | PR352 | Written exam | PR312/313/ 314/315/316 | Thesis dissertation |
| CC511 | Written exam | PR346 | Written exam Oral presentation | PR331 | Practical Exam Portfolio | PR332/338/339 | Logbook and reflective learning portfolio WBA, Clinical oral exam |
| CC508 | Written exam Presentation Assignment | PR355 | Written exam Presentations/seminars | PR354 | Written exam Presentation | PR368 | Written exam Oral Examination |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PR365 | Written exam Oral examination | PR347 | Written exam Presentation | PR364 | Oral exam Written exam Reflective writing |
| CC504 | Written exam Assignment | PR351 | Written exam | | | | |



PLO - B1. Evaluate critically current research and advanced scholarship in the discipline.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------|--|-------|---|-------------------------------|---|
| CC502 | Written exam Assignment | PR367 | Written exam Oral Presentation | PR361 | Written exam Oral examination Presentation | PR321/322/ 323/324/325/326 | Oral examination |
| CC508 | Written exam Presentation Assignment | PR346 | Written exam Oral presentation | PR352 | Written exam | PR312/313/ 314/315/316 | Thesis dissertation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PR355 | Written exam Presentations/ seminars | PR331 | Practical Exam Portfolio | PR332/338/339 | Logbook and reflective learning portfolio WBA, Clinical oral exam |
| CC504 | Written exam Assignment | PR365 | Written exam Oral examination | PR354 | Written exam Presentation | PR368 | Written exam Oral Examination |
| PR366 | Written exam Presentation | PR351 | Written exam | PR347 | Written exam Presentation | PR364 | Oral exam Written exam Reflective writing |



PLO - B2. Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------|--|-------|---|-------------------------------|---|
| CC502 | Written exam Assignment | PR367 | Written exam Oral Presentation | PR361 | Written exam Oral examination Presentation | PR321/322/323/ 324/325/326 | Oral examination |
| CC508 | Written exam Presentation Assignment | PR346 | Written exam Oral presentation | PR352 | Written exam | PR312/313/ 314/315/316 | Thesis dissertation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PR355 | Written exam Presentations/s eminars | PR331 | Practical Exam Portfolio | PR332/338/339 | Logbook and reflective learning portfolio WBA, Clinical oral exam |
| CC504 | Written exam Assignment | PR365 | Written exam Oral examination | PR354 | Written exam Presentation | PR368 | Written exam Oral Examination |
| PR366 | Written exam Presentation | PR351 | Written exam | PR347 | Written exam Presentation | | |



PLO - B3. Synthesize clinical findings to make a diagnosis and treatment plan or plan patient follow-

up and appreciate their limitations and to take advice or refer a patient when appropriate

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|--------------------------------------|-------|--|-------|---|---------------|--|
| CC510 | Written exam | PR346 | Written exam Oral presentation | PR351 | Written exam | PR331 | Practical Exam Portfolio |
| CC503 | Written exam | PR355 | Written exam Presentations/se minars | PR361 | Written exam Oral examination Presentation | PR332/338/339 | Logbook and reflective learning portfolio WBA, Clinical oral exam |
| CC511 | Written exam | PR365 | Written exam Oral examination | PR352 | Written exam | PR368 | Written exam Oral Examination |
| PR367 | Written exam Oral Presentation | | | | | | |



PLO - B4. Provide treatment for patients with moderate to difficult requirements.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessme nt Tool | CLO | Assessment Tool |
|-------|---|-------|----------------------------|-------|---------------------------------|---------------|--|
| CC509 | Written exam Quizzes Presentation Seminar Technique | CC504 | Written exam Assignment | PR366 | Written exam Presentation | PR332/338/339 | Logbook and reflective learning portfolio WBA, Clinical oral exam |

PLO - C1. Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
|-------|---|-------|------------------------------|-------|--------------------------------|---------------|---|
| CC503 | Written exam | CC504 | Written exam Assignment | PR331 | Practical Exam Portfolio | PR332/338/339 | Logbook and reflective learning portfolio WBA |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PR366 | Written exam Presentation | | | | |

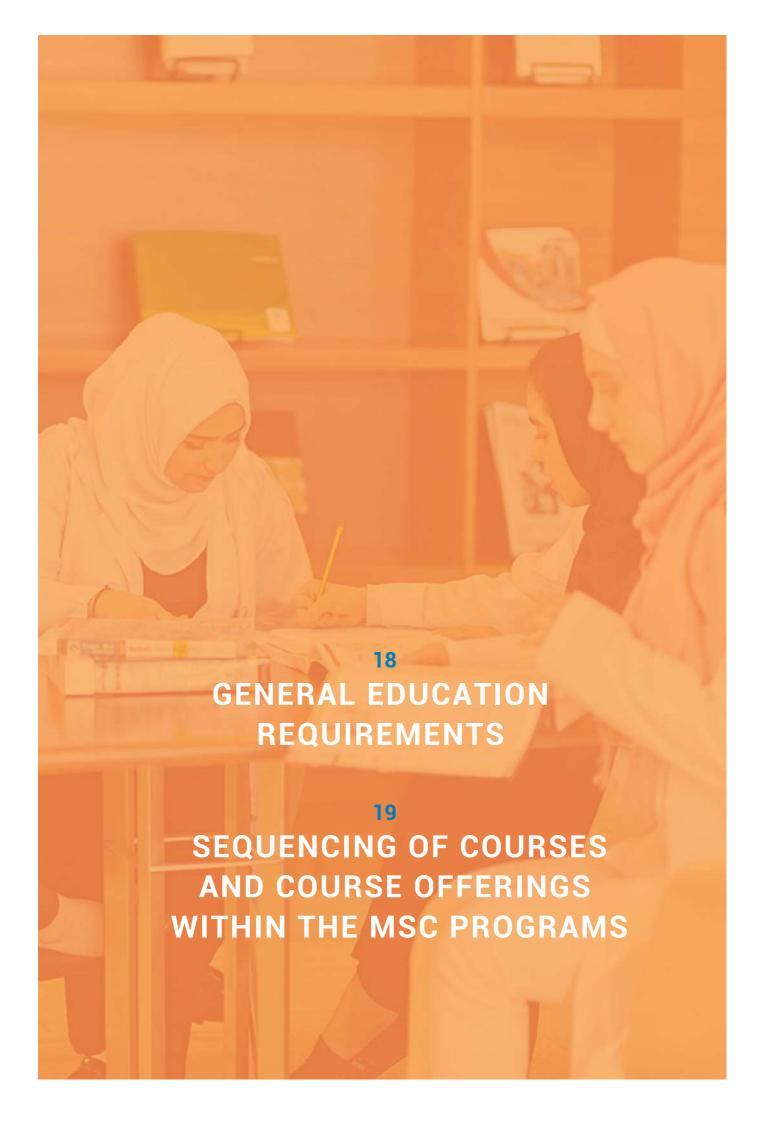
PLO - C2. Become life-long learners and educators.

| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessme nt Tool | CLO | Assessment Tool |
|-------|---|-------|------------------------------|---------------|---|-------|----------------------------------|
| CC503 | Written exam | CC504 | Written exam Assignment | PR331 | Practical Exam Portfolio | PR368 | Written exam Oral Examination |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PR366 | Written exam Presentation | PR332/338/339 | Logbook and reflective learning portfolio WBA | | |



PLO - C3. Appreciate that evidence-based practice underpins patient care.

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|-------|---|-------|--|----------|---|-------------------------------|---|
| CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool | CLO | Assessment Tool |
| CC502 | Written exam Assignment | PR367 | Written exam Oral Presentation | PR361 | Written exam Oral examination Presentation | PR321/322/333/ 334/335/336 | Oral examination |
| CC508 | Written exam Presentation Assignment | PR346 | Written exam | PR352 | Written exam | PR312/313/ 314/315/316 | Thesis dissertation |
| CC509 | Written exam Quizzes Presentation Seminar Technique | PR355 | Written exam Presentations/s eminars | PR331 | Practical Exam Portfolio | PR332/338/339 | Logbook and reflective learning portfolio WBA |
| CC504 | Written exam Assignment | PR365 | Written exam Oral examination | PR354 | Written exam Presentation | PR368 | Written exam Oral Examination |
| PR366 | Written exam Presentation | PR351 | Written exam | PR347 | Written exam Presentation | PR364 | Oral exam Written exam Reflective writing |





18. General Education Requirements

The General Education requirements are designed to add breadth to the student intellectual experience. They ensure that when students complete their MSc program, they can demonstrate competence in scientific quantitative and critical reasoning. The following specific courses have been designed to address those competencies:

| Applied Basic Sciences I | CC510 |
|---|-------|
| Applied Basic Sciences II | CC511 |
| Research Methodology and Biostatistics | CC502 |
| Clinical Governance, Legislation and Ethics | CC503 |
| Molecular Biology | CC504 |
| Radiology and Imaging | CC509 |
| Oral Epidemiology | CC508 |

19. Sequencing of Courses and Course Offerings within the MSc Programs

HBMCDM offers the following MSc programs:

- Endodontics
- Orthodontics
- Pediatric Dentistry
- Periodontology
- Prosthodontics

The MSc is a taught postgraduate three-year program that incorporates research and clinical training at the level of specialist trainee and appropriate preparation for the Membership Examination of the Faculty of Dentistry of the Royal Colleges of Surgeons of Edinburgh (UK), and Ireland (Ireland). The Program is also recognized by The Ministry of Higher Education of Kuwait and The Ministry of Higher Education of Jordan. The Professional Qualification Recognition Committee in UAE has granted specialist status immediately upon graduation to the graduates of HBMCDM.

All programs comprise a total of 120 credits to fulfil the requirement for the award of the MSc degree by MBRU. Courses are run across 2 semesters per year with an average of 20 credits available per semester. Each student is required to attend for a 16-week semester plus an additional four weeks of clinical training at the end of each semester, that is, a total of 20 weeks (1 week = 40 hours). A training period of 3 years (4500 hours) with content apportioned approximately as 60% clinical, 25% academic and 15% research.

The research element is meant to underpin the evidence—based approach to clinical practice and embed critical thinking. Students are supervised by a faculty member and completion of a dissertation is mandatory for graduation.

Each program has a fixed curriculum and graduation is dependent on passing all courses in the curriculum, demonstrating clinical proficiency in the specialty, completing a research project and defending a dissertation. Failure to do so in any course will result in the student not being awarded the academic degree or certificate.

It is the student's responsibility to acquaint himself/herself thoroughly with the information included in the Catalog and the Program Syllabus.



19.1. Teaching and Learning Methods

The majority of the knowledge base of the curriculum is delivered through a blend of teaching and learning activities including lectures and small group tutorials. Students are expected to prepare in advance for small group teaching in order to contribute to class discussion. Communication skills are important in clinical disciplines and small group teaching encourages students to express themselves. Communication skills and participation are often assessed.

Other teaching and learning methods are described below:

Seminars and Case Based Discussions

During the course of study, students will participate in literature review seminars and case based discussion.

Clinical Education and Training

- The dental clinical skills center is located in the simulation center on the 2nd floor of Building 14. The programs in Prosthodontics, Endodontics and Pediatric Dentistry involve training in the simulation center on typodonts.
- The technology laboratory is located on the ground floor of Building 34 and houses the full range of materials and equipment including CAD/CAM, box scanners and milling machine. Both Orthodontic and Prosthodontic students have course work in the laboratory which is supported by three dental technicians.
- Students will spend approximately 60% of their time during their three-year program treating patients under faculty supervision.

Research

The MSc has a research project and dissertation. The dissertation is based on a research project conducted by the candidate. The topic for a dissertation will be chosen by the candidate in conjunction with the faculty supervisor.

Students must initiate and complete a research project using the elements of scientific method, including research design, accurate reporting, critical thinking and the formulation of conclusions based on scientific data rather than opinion. Collaboration with other hospitals, medical institutions and other health-orientated organizations is encouraged to foster collaborative research. The primary supervisor will normally be a faculty within the program. The student must work closely with their research supervisors to ensure satisfactory progress. The research protocol will be developed within the first year of the program. Implementation and data collection will commence after Institutional Review Board approval (where appropriate) and other regulatory approvals as necessary. It is anticipated that data collection will be completed by the end of the second year to allow for data analysis, dissertation preparation and defense of the dissertation by the end of year 3.

19.2. Program Structure

All programs have a study plan and program syllabus which outlines the learning objectives and course content.

19.3. Endodontics Program Description

Introduction

Endodontics is the practice of pain management and pulp therapy. This includes the prevention, treatment, and management of endodontic disease and its extension into the peri-radicular tissues. The curriculum uses cutting-edge instruments such as microscopes. Students are encouraged to sit the UK Royal Colleges of Surgeons examinations of the Diploma of Membership and Fellowship in Endodontics



19.3.1. Endodontics Study Plan

| Year 1 Semester 1 | 20 credits | Course code |
|--|------------|----------------|
| Examination and Diagnosis | 1 | EN841 |
| Applied Basic Sciences I | 2 | CC510 |
| Specialty Clinical Training- Clinical Skill Facility | 11* | EN842 |
| Specialty Clinical Training- Clinic | 1* | EN837 |
| Treatment Strategies and Plans in Endodontics and Pulp Therapy | 1 | EN843 |
| Scientific Literature | 1 | EN821 |
| Research Methodology and Biostatistics | 2 | CC502 |
| Clinical Governance: Legislation and Ethics | 1 | CC503 |
| Year 1 Semester 2 | 20 credits | Course code |
| Applied Basic Sciences II | 1 | CC511 |
| Oral Epidemiology | 1 | CC508 |
| oral Epidelinology | ' | 00300 |
| Non-Surgical Root Canal Treatment | 1 | EN844 |
| | · | |
| Non-Surgical Root Canal Treatment | 1 | EN844 |
| Non-Surgical Root Canal Treatment Specialty Clinical Training - Clinic | 1 12 | EN844 EN837 |



| Year 2 Semester 1 | 20 credits | Course code |
|---|------------|-------------|
| Research Dissertation | 4 | EN813 |
| Non-Surgical Root Canal Retreatment | 1 | EN846 |
| Dental Traumatology | 1 | EN850 |
| Scientific Literature | 2 | EN823 |
| Specialty Clinical Training - Clinic | 12* | EN838 |
| Year 2 Semester 2 | 21 credits | Course code |
| Surgical Root Canal Treatment | 1 | EN849 |
| Microbiology | 1 | EN852 |
| Research Dissertation | 4 | EN814 |
| Scientific Literature | 2 | EN824 |
| Molecular Biology | 1 | CC504 |
| Specialty Clinical Training | 12 | EN838 |
| Year 3 Semester 1 | 20 credits | Course code |
| Periodontology and Prosthodontics for Endodontic Specialists | 1 | EN854 |
| Research Dissertation | 5 | EN815 |
| Scientific Literature | 2 | EN825 |
| Specialty Clinical Training - Clinic | 12* | EN839 |
| Year 3 Semester 2 | 19 credits | Course code |
| Research Dissertation | 5 | EN816 |
| Scientific Literature | 1 | EN826 |
| Consolidation of Endodontic Training | 1 | EN853 |
| Specialty Clinical Training - Clinic | 12 | EN839 |

^{*}this is a CC course and will be graded at the end of Semester 2.

19.3.2. Endodontics Course Descriptions Please refer to Endodontic Syllabus.



19.4. Orthodontic Program Description

Introduction

Orthodontics is that branch of dentistry concerned with facial growth, with development of the dentition and occlusion, and with the diagnosis, interception, and treatment of occlusal anomalies. The Master of Science degree taught postgraduate three-year program incorporates clinical training at the level of specialist trainee and appropriate preparation for the Membership and Fellowship Examinations of the Royal Colleges of Surgeons UK.

19.4.1. Orthodontic Study Plan

| Year 1 Semester 1 | 21 Credits | Course code |
|---|----------------------------|--|
| Applied Basic Sciences I | 2 | CC510 |
| Research Methodology and Biostatistics | 2 | CC502 |
| Clinical Governance, Legislation & Ethics | 1 | CC503 |
| Research Dissertation | 1 | OR611 |
| Scientific Literature | 1 | OR621 |
| Specialty Clinical Training | 7* | OR637 |
| Clinical Skills | 5 | OR641 |
| Basic Science Relevant to Orthodontics | 1 | OR642 |
| Orthodontic Diagnosis and Treatment Planning | 1 | OR643 |
| | | |
| Semester 2 | 20 Credits | Course code |
| Semester 2 Applied Basic Sciences II | 20 Credits | Course code CC511 |
| | | |
| Applied Basic Sciences II | 1 | CC511 |
| Applied Basic Sciences II Oral Epidemiology | 1 | CC511 CC508 |
| Applied Basic Sciences II Oral Epidemiology Radiology and Imaging | 1 1 1 | CC511 CC508 CC509 |
| Applied Basic Sciences II Oral Epidemiology Radiology and Imaging Research Dissertation | 1 1 1 | CC511 CC508 CC509 OR612 |
| Applied Basic Sciences II Oral Epidemiology Radiology and Imaging Research Dissertation Scientific Literature Specialty Clinical Training Growth Assessment – Cephalometric Methods for Assessment of Dentofacial Changes | 1 1 1 1 | CC511 CC508 CC509 OR612 OR622 |
| Applied Basic Sciences II Oral Epidemiology Radiology and Imaging Research Dissertation Scientific Literature Specialty Clinical Training Growth Assessment – Cephalometric Methods for | 1 1 1 1 1 1 | CC511 CC508 CC509 OR612 OR622 OR637 |



| Year 2 Semester 1 | 20 Credits | Course code |
|---|------------|-------------|
| Temporomandibular Disorders | 1 | PR366 |
| Research Dissertation | 3 | OR613 |
| Scientific Literature | 1 | OR623 |
| Specialty Clinical Training | 12* | OR638 |
| Craniofacial Development and Cephalometric Assessment | 1 | OR647 |
| Guiding the Development of the Occlusion | 1 | OR652 |
| Orthodontic Tooth Movement and Biomechanics | 1 | OR657 |
| Semester 2 | 20 Credits | Course code |
| Molecular Biology | 1 | CC504 |
| Research Dissertation | 2 | OR614 |
| Scientific Literature | 1 | OR624 |
| Specialty Clinical Training | 12* | OR638 |
| Adult Orthodontics | 1 | OR650 |
| Long-term Effects of Orthodontic Treatment - latrogenic Effects of Orthodontic Treatment | 1 | OR648 |
| Orthodontic Techniques | 1 | OR658 |
| Multidisciplinary Treatment Modalities | 1 | OR653 |
| Year 3 Semester 1 | 20 Credits | Course code |
| Research Dissertation | 7 | OR615 |
| Scientific Literature | 1 | OR625 |
| Specialty Clinical Training | 12* | OR639 |
| Semester 2 | 20 Credits | Course code |
| Research Dissertation | 6 | OR616 |
| Scientific Literature | 1 | OR626 |
| Specialty Clinical Training | 12* | OR639 |
| Consolidation of Orthodontic Training | 1 | OR659 |

^{*}This is a CC course and will be graded at the end of Semester 2.

19.4.2. Orthodontic Program Course Descriptions Please refer to Orthodontic Syllabus



19.5. Pediatric Dentistry Program Description

Introduction

Pediatric Dentistry is the practice and teaching of, and research into the comprehensive therapeutic oral health care for children from birth through adolescence, including care for those who demonstrate intellectual, medical, physical, psychological and/or emotional problems. The Master of Science in Pediatric Dentistry taught postgraduate three-year program incorporates clinical training at the level of specialist trainee and appropriate preparation for the Membership and Fellowship Examinations of the Royal Colleges of Surgeons UK.

19.5.1. Pediatric Dentistry Study Plan

| Year 1 Semester 1 | 21 credits | Course code |
|---|------------|-------------|
| Introduction to Pediatric Dentistry | 2 | PD441 |
| Clinical Governance, Legislation and Ethics | 1 | CC503 |
| Restorative Techniques | 1 | PD442 |
| Applied Basic Sciences I | 2 | CC510 |
| Scientific Literature | 1 | PD421 |
| Research Methodology and Biostatistics | 2 | CC502 |
| Specialty Clinical training | 9* | PD437 |
| Research Dissertation | 2 | PD411 |
| Orthodontic Diagnosis and Treatment Planning | 1 | OR643 |
| Semester 2 | 21 credits | Course code |

| Semester 2 | 21 credits | Course code |
|---|------------|-------------|
| Orthodontics for the Pediatric Dentists | 2 | PD444 |
| Scientific Literature | 1 | PD422 |
| Behavioral Science and Management | 1 | PD446 |
| Specialty Clinical Training | 12 | PD437 |
| Research Dissertation | 2 | PD412 |
| Applied Basic Sciences II | 1 | CC511 |
| Oral Epidemiology | 1 | CC508 |
| Radiology and Imaging | 1 | CC509 |



| Year 2 Semester 1 | 20 credits | Course code |
|---|------------|-------------|
| Research Dissertation | 3 | PD413 |
| General Pediatrics | 2 | PD445 |
| Scientific Literature | 1 | PD423 |
| Specialty Clinical Training | 12* | PD438 |
| Basic Sciences in Pediatric Dentistry | 1 | PD450 |
| Pediatric Oral Pathology and Medicine | 1 | PD443 |
| Semester 2 | 20 credits | Course code |
| Dental Traumatology | 1 | PD451 |
| Prevention of Oral Disease | 1 | PD448 |
| Research Dissertation | 4 | PD414 |
| Scientific Literature | 1 | PD424 |
| Specialty Clinical Training | 12 | PD438 |
| Molecular Biology | 1 | CC504 |
| Year 3 Semester 1 | 19 credits | Course code |
| Research Dissertation | 4* | PD415 |
| Consolidation of Pediatric Dentistry Training 1 | 2 | PD454 |
| Scientific Literature | 1 | PD425 |
| Specialty Clinical Training | 12* | PD439 |
| Semester 2 | 19 credits | Course code |
| Research Dissertation | 4 | PD416 |
| Scientific Literature | 1 | PD426 |
| Consolidation of Pediatric Dentistry Training 2 | 2 | PD455 |
| Specialty Clinical Training | 12 | PD439 |

^{*}This is a CC course and will be graded at the end of Semester 2.

19.5.2. Pediatric Dentistry Course Descriptions Please refer to Pediatric Dentistry syllabus.



19.6. Periodontology Program Description

Introduction

Periodontology is the specialty of dentistry focused on the prevention, diagnosis, and clinical management of the diseases or conditions that affect the hard and soft tissues supporting or surrounding the teeth.

The Master of Science in Periodontology taught postgraduate three-year program incorporates clinical training at the level of specialist trainee and appropriate preparation for the Membership and Fellowship Examinations of the Royal Colleges of Surgeons UK.

19.6.1. Periodontology Study Plan

| Year 1 Semester 1 | 19 Credits | Course code |
|---|------------|-------------|
| Applied Basic Sciences I | 2 | CC510 |
| Basic Biological Science Relevant to Periodontology | 1 | PE241 |
| Diagnosis and Treatment Planning in Periodontology | 1 | PE243 |
| Specialty Clinical Training - Clinic | 10* | PE237 |
| Clinical Governance, Legislation and Ethics | 1 | CC503 |
| Research Methodology and Biostatistics | 2 | CC502 |
| Research Dissertation | 1 | PE211 |
| Scientific Literature | 1 | PE221 |

| Year 1 Semester 2 | 20 Credits | Course code |
|---|------------|-------------|
| Scientific Literature | 1 | PE222 |
| Non-Surgical Periodontal Treatment | 1 | PE244 |
| Periodontal Surgery | 1 | PE249 |
| Basic Implant Surgical and Restorative Techniques | 1 | PR351 |
| Specialty Clinical Training - Clinic | 12 | PE237 |
| Research Dissertation | 1 | PE212 |
| Applied Basic Sciences II | 1 | CC511 |
| Radiology and Imaging | 1 | CC509 |
| Oral Epidemiology | 1 | CC508 |



| Year 2 Semester 1 | 20 Credits | Course code |
|--|------------|-------------|
| Interdisciplinary Interfaces | 1 | PE246 |
| Research Dissertation | 3 | PE213 |
| Advanced Implant Surgical and Restorative Techniques | 2 | PR352 |
| Scientific Literature | 2 | PE223 |
| Specialty Clinical Training - Clinic | 12* | PE238 |

| Year 2 Semester 2 | 21 Credits | Course code |
|--|------------|-------------|
| Oral Pathology and Oral Medicine | 1 | PE256 |
| Research Dissertation | 4 | PE214 |
| Scientific Literature | 2 | PE224 |
| Mucogingival Surgery and Regenerative techniques | 1 | PE250 |
| Specialty Clinical Training - Clinic | 12 | PE238 |
| Molecular Biology | 1 | CC504 |

| Year 3 Semester 1 | 20 Credits | Course code |
|--------------------------------------|------------|-------------|
| Research Dissertation | 5 | PE215 |
| Scientific Literature | 1 | PE225 |
| Specialty Clinical Training - Clinic | 14* | PE239 |

| Year 3 Semester 2 | 20 Credits | Course code |
|---------------------------------------|------------|-------------|
| Research Dissertation | 6 | PE216 |
| Scientific Literature | 1 | PE226 |
| Consolidation of Periodontic Training | 1 | PE259 |
| Specialty Clinical Training - Clinic | 12 | PE239 |

^{*}This is a CC course and will be graded at the end of Semester 2.

19.6.2. Periodontology Program Description

Please refer to Periodontology syllabus.



19.7. Prosthodontics Program Description

Introduction

Prosthodontics is the restoration or replacement of diseased or missing teeth. The examination of the patient's dental, pulpal, periradicular, periodontal, oral and peri-oral tissues is fundamental prior to restorative treatment and in determining the correct diagnosis.

The Master of Science in Prosthodontics taught postgraduate three-year program incorporates clinical training at the level of specialist trainee and appropriate preparation for the Membership and Fellowship Examinations of the Royal Colleges of Surgeons UK.

19.7.1. Prosthodontics Study Plan

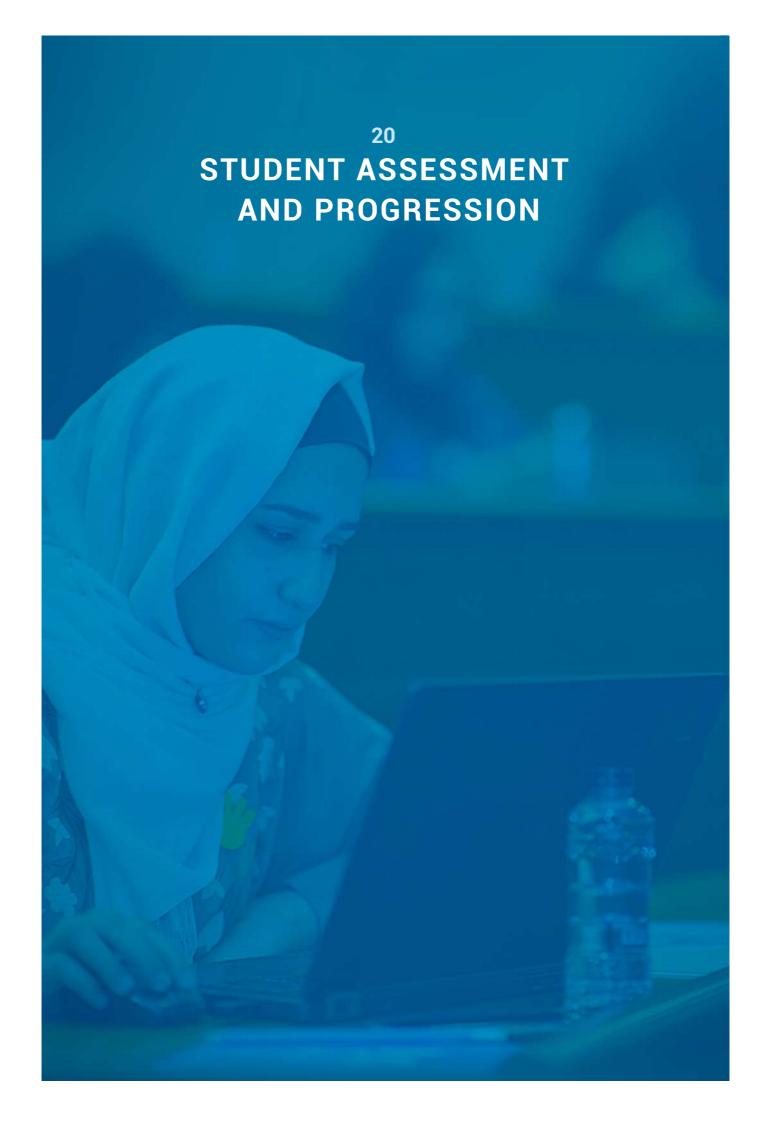
| Prostnodontics Study Plan | | |
|--|------------------|---|
| Year 1 Semester 1 | 18 credits | Course code |
| Applied Basic Sciences I | 2 | CC510 |
| Research Methodology and Biostatistics | 2 | CC502 |
| Clinical Governance: Legislation and Ethics | 1 | CC503 |
| Scientific Literature | 1 | PR321 |
| Advanced Prosthodontics: Simulation Center Clinical Skills | 9 | PR331 |
| Principles of Fixed Prosthodontics | 1 | PR346 |
| Dental Biomaterials | 1 | PR347 |
| Cariology, Tooth Wear, Compromised Dentitions | 1 | PR367 |
| and Restorations | | |
| Year 1 Semester 2 | 19 credits | Course code |
| | 19 credits | Course code |
| Year 1 Semester 2 | | |
| Year 1 Semester 2 Applied Basic Sciences II | 1 | CC511 |
| Year 1 Semester 2 Applied Basic Sciences II Radiology and Imaging | 1 | CC511 CC509 |
| Year 1 Semester 2 Applied Basic Sciences II Radiology and Imaging Oral Epidemiology | 1 1 1 | CC511 CC509 CC508 |
| Year 1 Semester 2 Applied Basic Sciences II Radiology and Imaging Oral Epidemiology Research Dissertation | 1 1 1 1 | CC511 CC509 CC508 PR312 |
| Year 1 Semester 2 Applied Basic Sciences II Radiology and Imaging Oral Epidemiology Research Dissertation Scientific Literature | 1 1 1 1 | CC511 CC509 CC508 PR312 PR322 |



| Year 2 Semester 1 | 20 credits | Course code |
|---|------------|-------------|
| | | |
| Temporomandibular Disorders | 1 | PR366 |
| Research Dissertation | 2 | PR313 |
| Scientific Literature | 1 | PR323 |
| Specialty Clinical Training - Clinic | 12* | PR338 |
| Advanced Implant Surgical and Restorative Techniques | 2 | PR352 |
| Removable Prosthodontics: Partial dentures | 1 | PR354 |
| Esthetics and Digital Dentistry | 1 | PR368 |
| Year 2 Semester 2 | 20 credits | Course code |
| Molecular Biology | 1 | CC504 |
| Research Dissertation | 5 | PR314 |
| Scientific Literature | 1 | PR324 |
| Specialty Clinical Training - Clinic | 12 | PR338 |
| Medical problems relevant to Prosthodontics | 1 | PR361 |
| Year 3 Semester 1 | 22 credits | Course code |
| Periodontics and Endodontics for Prosthodontic Specialists | 1 | PR365 |
| Research Dissertation | 8 | PR315 |
| Scientific Literature | 1 | PR325 |
| Specialty Clinical Training - Clinic | 12* | PR339 |
| Year 3 Semester 2 | 21 credits | Course code |
| Research Dissertation | 7 | PR316 |
| Scientific Literature | 1 | PR326 |
| | | |
| Specialty Clinical Training - Clinic | 12 | PR339 |

^{*}this is a CC course and will be graded at the end of Semester 2.

19.7.2. Prosthodontics Course Descriptions Please refer to Prosthodontic syllabus.





20. Student Assessment and Progression

Students are required to maintain a Personal Development Portfolio (PDP), which incorporates a summary of their clinical logbook, reflective learning portfolio, workplace-based assessments, and 360° appraisal.

Students are permitted to re-sit on assessment deemed to have not reached the pass grade, that is "below expectations".

Some programs such as Pediatric Dentistry and Orthodontics are in the process of incorporating OSCE assessment as part of the clinical competency evaluation.

| Objective Structured Clinical Examination (OSCE) | summative |
|--|-------------|
| Personal Development Portfolio | |
| Clinical Logbook and Reflective learning portfolio | formative / |
| | summative |
| Workplace-based assessments | formative / |
| | summative |
| 360° appraisal | formative |
| Case Report Presentation | formative / |
| | summative |
| Clinical Examinations with patients/case histories | summative |

20.1. Mechanisms and Methods of Assessment

A range of assessment methods is used as appropriate to the learning outcomes.

20.1.1. Assessment of Knowledge and Understanding

| Written examination (MCQs, short answers, essays) | summative |
|---|-----------|
| Essay assignments | summative |
| Oral Examination | summative |

20.1.2. Assessment of Clinical Skills and Attitudes

HBMCDM Workplace-Based Assessments (WBA)

Workplace based assessments are intended to provide feedback to the trainee. Therefore, workplace-based assessments are assessments for learning.

The summative assessment tools are generally written exams that determine whether the performance of the trainee is satisfactory or unsatisfactory. Formative feedback can be used by the trainee for self-directed learning for areas where there are deficiencies in performance, and also in those areas where a trainee has done well.

WBAs must be:

- Valid: Must comprise direct observation of workplace tasks and be "blueprinted" against program curriculum and ILOs
- Reliable: Multiple measures of outcomes: number of assessors and methods, and must be frequent
- Feasible: The assessment should not add time to the workplace task being assessed. Assessor should be able to complete scoring and feedback within 5-10 minutes
- Trainee- and assessor-led: But trainee has the overview and should be proactive



WBAs include:

Direct Observation of Procedural Skills (DOPS)

A DOPS is an assessment tool designed to evaluate the performance of a trainee in undertaking a practical procedure, against a structured checklist. The trainee receives immediate feedback to identify strengths and areas for development.

Case-Based Discussion (CBD)

The CBD assesses the performance of a trainee in their management of a patient to provide an indication of competence in areas such as clinical reasoning, decision-making and application of medical knowledge in relation to patient care. It also serves as a method to document conversations about, and presentations of, cases by trainees. The CBD should focus on a written record (such as written case notes, out-patient letter, discharge summary).

Mini-Clinical Evaluation Exercice (mini-CEX)

This tool evaluates a clinical encounter with a patient to provide an indication of competence in skills essential for good clinical care such as history taking, examination and clinical reasoning. The trainee receives immediate feedback to aid learning. It can be used at any time and in any setting when there is a trainee and patient interaction and an assessor is available.

Summary of workplace-based assessment tools used at HBMCDM

| WBA | Competencies | Examples of Assessors | Setting |
|----------|---|--|--|
| DOPs | Technical skills, procedures and protocols | Educational/ Clinical supervisors, senior trainee, multi professional team (MPT) | Pre-clinic skills, clinic, operating theatre |
| CBD | Clinical judgment, clinical management, reflective practice | Educational/ Clinical supervisors, senior trainee | Multiple areas covered by a challenging case |
| Mini-CEX | Communication with patient, physical examination, diagnosis, treatment planning | Educational/ Clinical supervisors, senior trainee | Clinic, community, operating theatre |

Formative Feedback

Feedback to students is given on a frequent basis in the clinical situation on a one-to-one basis. This is initiated by the sign off of the *Clinical Logbook*. Verbal feedback is provided in addition to a grade. The student groups are small, and this has the advantage of allowing direct and regular informal feedback to students. This personal feedback enables the student to reflect on individual skills and performance.

Formative assessment is assessment that does not contribute to the final mark. Formative assessment focuses on assessing progress, giving feedback and on reflection by the student. Formative assessments should enable the student to develop and improve before completing summative assessments. Students have a responsibility to consider feedback and to act on it. Mock written exams are conducted and are formative.



Summative Feedback

Summative assessment is assessment that contributes to the final mark. Summative assessment includes both coursework and examinations. Written comments are provided for all coursework on separate document that is returned to the student. Students should have opportunity, within reason, to seek clarification and further feedback; however, students are reminded that there can be no appeals concerning matters of academic judgment.

Schedule for students' assessment

| Clinical Training | Method of Assessment | Time for Assessment |
|--|--|--------------------------|
| Specialty Clinical Training/ Clinical Skill | Objective Structured Clinical Examination (OSCE) | In planning |
| Facility | Summative | |
| Specialty Clinical Training/ Clinic | Clinical Logbook and Reflective Learning Portfolio | Continuous assessment |
| | Summative and Formative | |
| | 360 Appraisal formative | End of Year 1,2,3 |
| | Case Based Presentation | Every |
| | Summative and formative | semester |
| | DOPs (Direct Observation of Procedural Skill) CBDs (Case Based Discussion) Mini CEX (Mini-Clinical Evaluation Exercise) | Every semester |
| | Formative | |
| | Meeting with Program Chair to discuss performance | End of every semester |
| | Formative | |

Grade Descriptors for clinical assessments (knowledge, skills and attitudes):

4 (Above Expectations)

- Knowledge
 - Sound depth and breadth of knowledge base, with good level of understanding. Ability to relate knowledge to problems, and critically assess possible solutions.
- Manual Skills
 - An excellent level of clinical skills. Excellent cross infection control. Excellent time management and accurate self-assessment
- Professionalism
 - Excellent professional attitude towards patients, colleagues and nurses. Excellent communication with patients, colleagues, and nurses. Excellent level of patient management and motivation.
- Attendance
 - Attended early for session. Plenty of time to prepare, set up, read clinical notes.

3 (Meets Expectations)

- Knowledge
 - An adequate knowledge of essential basic information and ability to relate this information to provide acceptable solutions to clinical problems.
- Manual Skills
 - An above average level of clinical skills. Above average cross infection control. Good time management. A basic level of self-assessment.



Professionalism

Good professional attitude towards patients, colleagues, and nurses. Effective communication with patients, colleagues, and nurses. Effective level of patient management and motivation.

Attendance

Attended early but had to rush to prepare for session.

2 (Borderline)

Knowledge

A poor level of knowledge with minimal ability to relate information to solving clinical problems.

Manual Skills

An adequate level of clinical skills. Questionable cross infection control. Poor time management.

Professionalism

Acceptable professional attitude towards patients, colleagues and nurses. Communication. Poor patient management and motivation.

• Attendance.

Attended, but just in time or a little arrived late.

1 (Below Expectations)

Knowledge.

Errors or omissions in basic essential information. Evidence suggests the student could be unsafe to work if does not improve.

· Manual Skills.

A poor level of clinical skills. Poor cross infection control. Poor time management. Some evidence to suggest the student is unsafe to practice if skills, cross infection control do not improve.

• Professionalism.

Poor or unacceptable professional attitude towards patients, colleagues and nurses. Poor communication skills. Lack of ability to manage patient/motivate patient.

Attendance

Absent. Not authorized. No telephone messages.

Workplace-based assessments have their own descriptors



20.2. Grading Policy

Grading Scale:

| Grade | Grade Points | Score | Performance |
|-------|--------------|-------------------------------------|----------------|
| Α | 4.00 | 90 - 100 | Excellent |
| A - | 3.70 | 87- 89 | Excellent |
| B+ | 3.30 | 84-86 | Very Good |
| В | 3.00 | 80-83 | Very Good |
| B - | 2.70 | 77-79 | Good |
| C + | 2.30 | 74-76 | Satisfactory |
| С | 2.00 | 70 - 73 | Satisfactory |
| C - | 1.70 | 67-69 | Unsatisfactory |
| D + | 1.30 | 64-66 | Unsatisfactory |
| D | 1.00 | 60-63 | Unsatisfactory |
| F | 0.00 | 0 - 59 | Fail |
| | | Can remediate even if score is < 60 | |

Other grades

| Letter Grade | Description |
|-----------------|--|
| Р | Pass grade shall be assigned for a course that is not graded on the A-F scale. These credits shall contribute to the total required for graduation in a particular degree program but shall not contribute to the grade point average. |
| тс | Transfer Credit shall be awarded to a student who has been granted credit from another institution. These credits shall contribute to the total required for graduation in a particular degree program but shall not contribute to the grade point average. |
| CC | Continuing Course Grade indicates a course which is more than a semester in length, is continuing. |
| AU | Audit grade shall designate a course registration with audit status. These credits are not included to the total required for graduation in a particular degree program and shall not contribute to the grade point average. |
| IP | In Progress a notation that indicates the student is currently enrolled in the course. |
| ı | Incomplete grade shall be used when student has not completed course requirements for extenuating circumstances. |
| W | Withdrawn grade shall be assigned to a student who withdraws formally from a course within the prescribed deadline after the period of Drop & Add. The deadline to withdraw formally from a course shall be 6 weeks from the beginning of classes in the semester. |
| WF | Withdrawn with Failure shall be assigned to a student who <i>withdraws</i> formally from a course after the prescribed deadline. |

Students receive A-F grades in all enrolled courses except Scientific Literature and Research Dissertation courses. These two courses will be graded on a P/F scale.



20.3. Weighting of Course Work

The relative weighting of the various examinations, practical projects or clinical procedures which make up the final course grade is at the discretion of the course coordinator and will be clearly provided to the student at the beginning of each course. Flexibility in weighting of course work is not inappropriate but options (such as dropping the worst test score, etc.) will be made known to the students at the beginning of the course.

20.4. Posting Grades

Grades shall be assigned to individual students on the basis of the student's performance. Grades of all courses of a semester will be ratified departmentally and subsequently by the Student Admission and Progression Committee (SAPC) in the week after the final examinations of the semester, uploaded on the LMS and released by the SSR following approval by the Dean or his nominated representative. Grades, once submitted, are not to be changed without the approval of the Dean. Such changes have to take place within 20 working days from the commencement of the following semester.

20.5. Student Grade Access and Appeal

The student will be able to access his/her grade in a course after the course instructor submits it to the LMS and it gets approved by the SAPC and the Dean of the college. The student is strongly encouraged to discuss his/her performance in class assignments during the semester with his/her instructor. A student who wishes to challenge the accuracy or fairness of his/her final course grade may appeal the grade within 5 working days of publication/posting of the final grades. A student should first raise the concern directly with the course coordinator and request clarification/confirmation of the accuracy and propriety of the final grade. The student may request that the course coordinator or a nominated faculty member review their exam paper for redundant questions and accuracy of entry of course codes and grades. If the instructor agrees that there was an error, the process for changing the grade, described in the section below, must be followed. If the instructor disagrees, the student can raise the issue with the program chair. If the program chair is in agreement with the faculty but the student remains convinced that the grade is in error, the student can then raise the issue in writing to Student Services for a final review with the Dean. The Dean should form a committee which would include a Chair, the course coordinator and one other faculty member, to review the details and the accuracy of the student's grade and provide their recommendation to the Dean's office via a written report within 5 working days. The Dean of the college communicates the final decision on the appeal to SSR and the chairperson of the concerned department within 5 working days of receiving the committee's decision. The final decision communicated by the Dean is not open to appeal.

20.6. Grade Point Requirement and General Policy Regarding Deficient Grades

Students are expected to maintain a cumulative grade point average of 3.0. A grade of "C- or below" in any given course is not acceptable for progress from year to year or for successful completion of a postgraduate program.

Successful completion of a remediation option short of repetition of a course in its entirety will result in a grade improvement from a "C-, D+ or D" to a maximum of a "B".

20.7. Remediation of Deficient Grades

Recommendations for scheduling of re-examinations, remediation projects or clinical practical exams for remediation of course failure should be communicated to the SAPC for review and approval. Furthermore, remediation programs or examinations of any type with the goal of improving a final grade should not be offered to a student without approval of the Student Admission and Progression Committee (SAPC). Students with final grades of "C-, D+ or D" will be considered by the Student Admission and Progression Committee for the option to take any



scheduled re-examination. All students will be informed as soon as the grades are released. Upon notification of approval to take re-examination(s), the student must contact the appropriate course coordinator(s) involved to confirm the intention to be present for the re-examination and the student must be present on the scheduled date(s). No substitute dates are permitted.

The specific option for remediation of a student's deficient grade is determined by the course coordinator and is based on the *course coordinator's judgment* as to the nature of the student's deficiencies and as to the student's ability to demonstrate mastery of the course material within a given period of time.

Options for remediation of deficiencies in a didactic course may include:

- Written exam after a review/tutorial period
- Oral examination
- A written paper or essay project

Options for remediation of deficiencies in a laboratory course may include:

- A special practical exam
- A remedial period of laboratory work with specific goals or practical examinations

Options for remediation of deficiencies in a clinical course may include:

• A remedial period of clinical work with specific goals

Repeating a course

A student who repeats a course in its entirety may be awarded any grade for the course. When a failed course is repeated in its entirety, both the original failing grade and the newly awarded grade will appear in the transcript. Only the new grade will be weighted into the cumulative grade point average computation.

Remediation of Grades other than Failure

In general, short of repeating an entire course, there are no options for improving an existing passing grade (C and above) through re-examination or other remedial work.

20.8. Examinations

The SAPC is responsible for scrutinizing and monitoring of examination quality by:

- 1. Ensuring adherence to university and college regulations, as they pertain to examinations
- 2. Reviewing reports from course coordinators and the Thesis Committee
- 3. Reviewing external examiners' reports (if applicable) in matters related to the examination
- 4. Verifying with course coordinators that examination papers are vetted in a standardized manner
- 5. Recommending improvements and ratifying changes to the examination process
- 6. Approving timetables and invigilation guidelines of final examinations, in conjunction with SSR
- 7. Receipt and consideration of final examinations results
- 8. Recommendation, in consultation with course coordinators, of supplementary examinations and/or re-sits
- 9. Handling misconduct in examinations, in cooperation with SSR
- 10. Liaising with appropriate bodies in cases of student appeals that relate to examination
- 11. Recommending amendments to the college examinations policy
- 12. Any other duties that may, from time to time, be assigned to the committee.

20.8.1. General Conduct of Students During Exams

- 1. Students must not indulge in any behavior or conduct that may disturb other candidates or disrupt the smooth progress of an examination.
- 2. Students are not permitted to smoke in any part of the examination room.
- 3. Students must obey the instructions of any invigilator and their attention is drawn to the regulations governing admission to and departure from the examination room.
- 4. Students are not allowed to take into the examination room any unauthorized books, manuscripts, notes, bags, cases or any means whereby they may improperly obtain assistance



- in their work. All such materials, including handbags, must be placed on a table outside the examination room, or at the front of the examination room.
- 5. Students are not allowed to take into the examination room wearable technological devices including smart watches and electronic transmission devices such as mobile phones, PDAs or any digital storage media such as flash drives.
- 6. Students are not allowed to take into the examination hall paper of any sort. Plain sheets of paper (or similar material) shall be provided in the examination hall should any student require them.
- 7. Students must be at the venue of the examination at least 15minutes before exam commencement.
- 8. Before the commencement of the examination, the student must place on the top right hand corner of the desk their ID card for inspection by one of the invigilators.
- 9. Students must not use any means whatsoever to communicate or obtain, directly or indirectly, assistance in their work, or give or attempt to give, directly or indirectly, assistance to any other candidate.
- 10. Students are permitted to use only personal non-programmable electronic calculators in an examination provided they are silent in operation and have an independent power supply.
- 11. Any suspected breach of the foregoing regulations will be investigated by the college.

20.8.2. Examination Invigilation

- 1. Invigilations are carried out by Faculty. The course coordinator and tutors do not, however, invigilate their own courses. As well as the nominated invigilator, there must also be a reserve invigilator available on the day of the examination. The course coordinator must be available during the examination so that the invigilator may contact him/her for any clarification that may arise.
- 2. Rooms should be sufficiently large enough for the number of students taking the examination to ensure adequate spacing between one student and another. Advance scheduling of all examinations will allow the scheduling of additional classrooms if necessary.
- 3. In the event of cheating and misconduct during an examination, the invigilator must do the following:
 - Collect any available evidence e.g. laptop, written notes etc.
 - Write student's name and ID on the evidence.
 - Complete an incident report after completion of the examination.
 - Submit the report to the Dean

The Dean will then decide on an appropriate course of action.

20.8.3. Examination Review

Questions, MCQs and short answer questions, should be reviewed and approved by all tutors who taught on the course. For all exams (in-course and final), exam questions/stations/cases should be reviewed and amended departmentally before the examination takes place.

Standard Setting:

Faculty receive periodic "training the trainers" courses by independent bodies such as Royal College of Surgeons of Edinburgh. Such courses are organized by MBRU for the purpose of training and standardization of examiners.

20.8.4. Absenteeism from Examinations

Please refer to the attendance policy in the MBRU *Student Handbook*. Additionally, the following will apply to the HBMCDM:

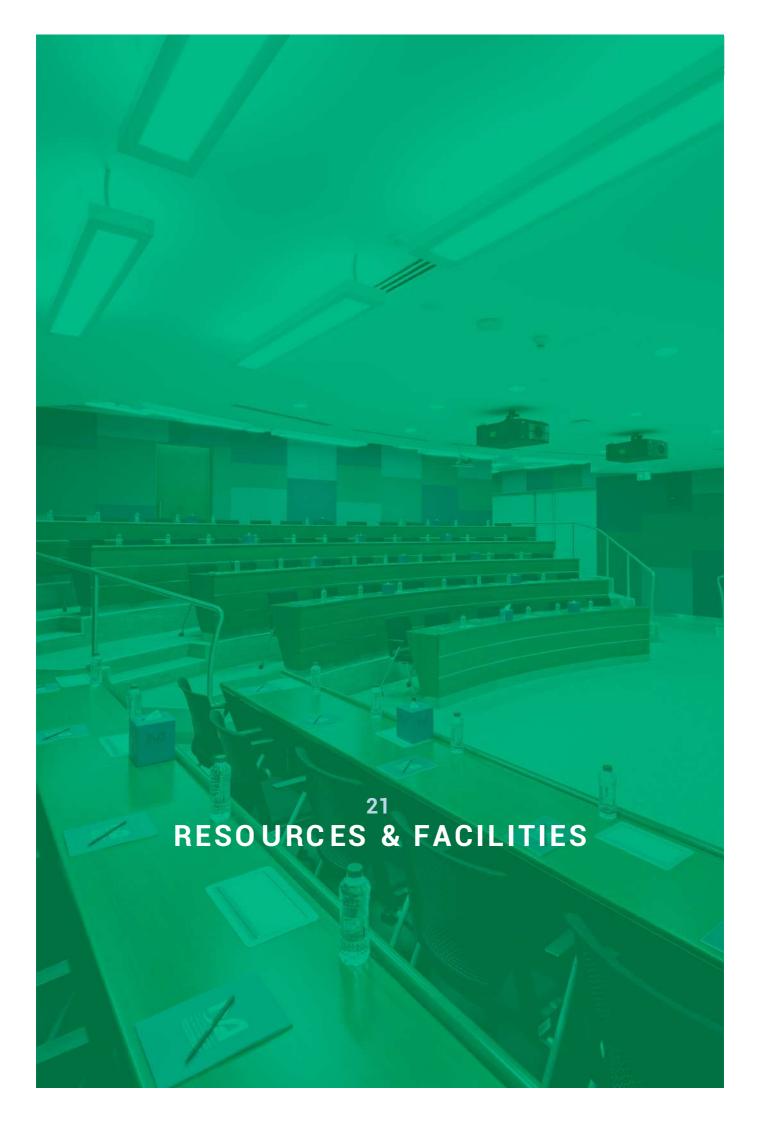
Attested sick leave accompanied by detailed medical reports may be accepted as an excuse for absence from course examinations subject to confirmation by an expert panel set up by the SAPC, if required.



A student exempted due to bereavement, hospital admission, or in extreme ill health should be offered the option of sitting for the examination in accordance with the circumstance prevailing at the time and must be in-line with university regulations.

20.8.5. Examination Feedback

Feedback of examinations should be given to students within one week of the release of the results. Feedback should not involve the release of questions but, a discussion of points of weaknesses with students.





21. Facilities and Services

The HBMCDM is located in the heart of Dubai Healthcare City (DHCC), a city within the city of Dubai. There are many facilities and services available for students in DHCC and HBMCDM provides services for students on campus.

Facilities

The beautiful Dubai Creek Park is just a short walk and the famous Wafi Mall and the City Centre Mall in Deira are only a few minutes' drive. The range of facilities and resources include a wide choice of hotels and furnished apartments in the area such as Raffles, Grand Hyatt, Park Hyatt and Movenpick, each with a fine selection of restaurants and cafes.

Banking Services

There are a number of branches of different banks available in DHCC

Food Facilities around HBMCDM

Food outlets and full-service restaurants are widely available within DHCC. These include a food court located in Al Razi Building 64 and offer Lebanese, Continental, Chinese and Indian cuisine. More restaurants are located in Ibn Sina Building 27 and include Starbucks Coffee and others that offers fresh sandwiches, salads, and snacks. There are snack vending machines available throughout the campus.

Parking

DHCC provides covered parking spaces for students and visitor use, free of charge. These spaces are available daily on a first-come basis. Permits are required to use these parking spaces. Students parking in the DHCC parking lots do so at their own risk. HBMCDM is not responsible for lost, damaged or stolen vehicles and/or property.

Prayer Rooms

Dedicated prayer rooms are available in most DHCC buildings. In building 34 there are two prayer rooms in the ground, second and third floors separately available for men and women. In addition, the MBRM-AMC Building 14 provides separate prayer rooms for men and women located on the ground floor.

Public Transportation

Dubai Municipality operates a reasonable public transportation bus service on 36 routes, daily between 06:00 a.m. – 11:00 pm. Up-to-date information about Dubai Municipality's public transport buses including route information and timings can be obtained from their website. The Dubai Metro provides a driverless, fully automated metro network in the city of Dubai. The Station is located within DHCC and is only 2 minutes' walk from HBMCDM.

Library Resources

The Al Maktoum Medical Library is located in the MBRM-AMC Building 14 Second floor. All HBMCDM students will have access to the Al Maktoum Medical Library using their student access card. The Al Maktoum Medical Library will provide students with access to over 10,000 journals including dental journals in addition, to study areas and computer facility resources.

Happiness Corner

Happiness Corner is a dedicated space available at Al Maktoum Medical Library 2nd floor to provide comfortable and inspiring environment for reading, group discussions & collaborative work with a collection of Arabic and English print books covering the subject areas in happiness and positivity.



Design Lab

In February 2019 a pioneering Design Lab was launched aimed at innovation in healthcare. The center will be for nurturing and fostering innovative healthcare solutions, serving as a focal point for creative thinkers from multiple disciplines to address healthcare challenges. The Lab will be an evolving space where the students will be empowered to move around and create their own solutions to emerging issues and will provide an environment that will encourage more of a shared leadership and promote better connectivity between faculty, students, patients and others. The Lab will host lectures and events to pursue and encourage innovation, including health design bootcamps, healthcare innovation seminars and workshops, and will undertake both faculty and student research projects while building communities of practice.

Student Recreation Areas

Student designation recreation areas are available at MBRU that allows students to relax, study, navigate the internet and socialize.

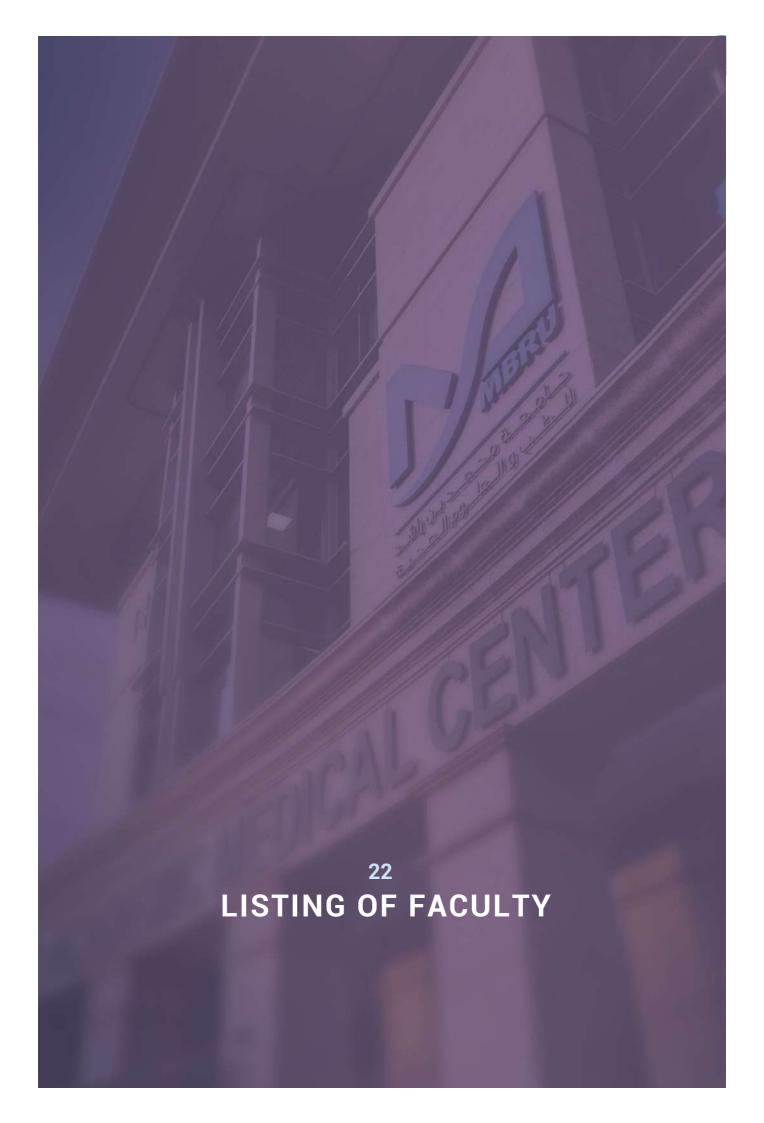
Student Visa Services

SSR in coordination with Human Resources & Administration Department (HRAD) assist international students with processing entry permit visas upon acceptance and with their residence visas once they officially join the university. For continuing students who wish to transfer their visa to MBRU for specific reasons, they need to approach HRAD through SSR first to discuss their request. It is the student's responsibility to monitor expiry deadlines and to initiate timely action and support required by contacting SSR and HRAD. **Clinics and Hospitals**

DHCC is a medical cluster with many clinics and hospitals in the various specialties. The Mediclinic City Hospital, Dr. Sulaiman Al Habib Hospital and others that have a 24-hour coverage for emergency cases. For further information on the clinical facilities or to make an appointment please contact DHCC call center at 800-HEALTH or visit www.dhcc.ae.

Department of Student Services and Registration

Department of Student Services and Registration (SSR) at MBRU are tailored to the graduate nature of this institution. The SSR is committed to helping students manage the demands of this rigorous educational program. Please refer to *Student Handbook*.





22. Listing of Faculty

MBRU HBMCDM is committed recruiting qualified, experienced, and dedicated faculty to set a foundation and culture of excellence. The process for recruitment, compensation, promotion and termination are described in the *Faculty Handbook*.

Full time faculty members will, as core teachers, have a major role in the design and delivery of teaching. In addition, MBRU HBMCDM will seek and recruit adjunct and part-time faculty members to contribute to teaching and assessment. Criteria for appointment of faculty are described in the University's Policy and Procedures on Recruitment and Appointment of Faculty and are based on the standards set by the UAE Commission for Academic Accreditation.

The table below lists fulltime faculty members with academic appointments in HBMCDM, the list is updated annually according to the time of issuing this catalog. New faculty members are expected to join as the College continues to recruit when required.



Abdel Rahman Tawfik Assistant Professor -Oral Surgery



Ahmed Ghoneima
Professor –
Orthodontics and
Chair – Pediatric
Dentistry and
Orthodontics



Amar Hassan Professor- Research & Biostatistics



Anas Alsalami Assistant Professor and Program Director - Pediatric Dentistry



Amre Atmeh Assistant Professor -Endodontics



Eman Al Nuaimi Lecturer - Pediatric Dentistry



Fatemeh Amir Rad Lecturer -Prosthodontics



Haitham Elbishari Assistant Professor -Prosthodontics



Iyad HusseinAssociate Professor Pediatric Dentistry



Jahanzeb Chaudhry Associate Professor -Oral and Maxillofacial Radiology



Keyvan Moharamzadeh Associate Dean -Education, Professor - Endodontics



Maanas Shah Lecturer -Periodontology





Manal Al Halabi Dean, Professor -Pediatric Dentistry



Mawlood Kowash Professor - Pediatric Dentistry



Mohamed Jamal Ahmed Assistant Professor and Program Director - Endodontics



Momen Atieh
Associate Professor Periodontology and
Chair - Oral
Diagnostics and
Surgical Sciences
Oral Diagnostics and
Surgical Sciences



Moosa Abuzayda Associate Professor -Prosthodontics and Chair - Restorative Dentistry



Rashid Elabed
Assistant Professor Endodontics



Samira Diar-Bakirly Lecturer -Orthodontics



Sabarinath
Prasad
Assistant Professor Orthodontics

Adjunct Faculty:

Donald Ferguson - Professor in Orthodontics, European University College Eleftherios Kaklamanos - Adjunct Associate Professor, Orthodontics Shaima Malik - Adjunct Associate Professor, Orthodontics Khaled A. Ghandour - Adjunct Associate Professor, Oral & Maxillofacial Surgery Nabeel Alsabeeha - Adjunct Associate Professor, Prosthodontics Lakshman Samaranayake - Adjunct Professor, Clinical Oral Pathologist

Honorary Professor

Athanasios E. Athanasiou - Executive Dean and Professor of Orthodontics, European University College, Cyprus

Zaid Bagain - Professor of Oral & Maxillofacial Surgery, Jordan

Visiting Faculty:

Fatima AlDhefairi - Specialist in Endodontics
Zuhair AlKhatib - Specialist in Endodontics
Angela Gonzalez - Specialist in Orthodontics
Noura Almidfa - Specialist in Orthodontics
Ghada Khalil - Specialist in Pediatric Dentistry
Halah Binladen - Specialist in Pediatric Dentistry
Noora Aburahima - Specialist in Pediatric Dentistry
Abeer Hakam - Specialist in Periodontology
Khalid Al Gergawi - Specialist in Prosthodontics
Yasmine Al-Zoubaidy - Specialist in Endodontics



Hamdan Bin Mohammed College of Dental Medicine

CATALOG | ACADEMIC YEAR 2022-2023

