




جامعة محمد بن راشد  
للطب والعلوم الصحية

MOHAMMED BIN RASHID UNIVERSITY  
OF MEDICINE AND HEALTH SCIENCES

A photograph of a dentist in a clinical setting. The dentist is wearing a blue surgical gown, a white face mask, and glasses. He is holding a dental microscope that is partially covered with a clear plastic bag. In the foreground, another person wearing a blue surgical gown and a dark head covering is visible, holding a dental instrument. The background shows a dental chair and other clinical equipment.

# Hamdan Bin Mohammed College of Dental Medicine CATALOG

2020-2021

**HAMDAN BIN MOHAMMED COLLEGE OF DENTAL MEDICINE  
CATALOG FOR ACADEMIC YEAR 2020-21**

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## 1. Academic Calendar (2020 - 2021)

The key dates relating to the Calendar for 2020 - 2021 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	August 29, 2020
New Student Orientation	August 31, 2020 – September 02, 2020
Classes Start for New & Returning Students	September 05, 2020
Semester 1	August 29, 2020 – February 03, 2021
Semester 1 – Clinical Practice	January 09, 2021 – February 03, 2021
Semester 1 – Final Exams	January 09 - 20, 2021
Semester 1 – SAPC Meeting	January 25, 2021
<b>WINTER BREAK – 3 weeks</b>	<b>December 19, 2020 - January 06, 2021</b>
Semester 2	Dates
Semester 2	February 06, 2021 - July 07, 2021
<b>SPRING BREAK – 2 weeks</b>	<b>March 27, 2021 - April 07, 2021</b>
Semester 2 – Clinical Practice	June 12, 2021 - July 07, 2021
Semester 2 – Final Exams	June 12 - 23, 2021
Semester 2 – SAPC Meeting	June 27, 2021
Semester 2 – SAPC Graduation Recommendation	July 4, 2021
<b>SUMMER BREAK Start</b>	<b>July 10, 2021</b>

### UAE Public Dates & Holidays 2020-2021 (Subject to Official Confirmation)

Occasion	Dates
Islamic New Year	August 19, 2020
Prophets Birthday	October 29, 2020
Martyr's Day	December 01, 2020
UAE National Day	December 02 - 03, 2020
New Year's Day	January 01, 2021
Ramadan Begins	April 13, 2021
Eid Al Fitr	May 12 - 15, 2021
Arafat & Eid Al Adha	July 18 - 22, 2021
Islamic New Year	August 9, 2021

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.mbruniversity.ac.ae](http://www.mbruniversity.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. A Brief Statement of 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 university is located within Dubai Health Care City (DHCC) as its education and research arm, thus creating an integrated academic and clinical environment for training medical and allied health professions, and innovative world-class standard research that is attuned to the needs of the country. The goal is to advance the quality and standard of healthcare in Dubai, the UAE, and the wider region. In addition to the existing Hamdan Bin Mohammed College of Dental Medicine and the College of Medicine, MBRU will encompass new colleges in the future.

The university 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.

### **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. 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. MBRU Vision, Mission and Goals

#### Vision

Mohammed Bin Rashid University of Medicine and Health Sciences (MBRU) will be a global hub for innovative and integrated health care education and research at the service of humanity.

#### Mission

The mission of MBRU is 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.

#### MBRU Values

1. **Respect:** For opinions and differences.
2. **Integrity:** Through honesty, openness, transparency and accountability.
3. **Excellence:** Through quality, motivation and creativity in communications, services and operations.
4. **Giving:** To foster a positive and happy relationship with our internal and external communities.
5. **Connectivity:** With local regional and international organizations towards becoming a global hub for health care education and research.

#### MBRU Goals

The goals of MBRU are to:

1. Develop a quality healthcare workforce with high capacity by training and graduating highly skilled and competent healthcare workers who are competitive internationally and practice with high standards of ethics and professionalism.
2. Develop medical scientific research capacity attuned to regional and national needs through an integrative curriculum, and by creating an enabling environment that attracts highly skilled researchers and supports research programs.
3. Actively engage with the community through outreach programs that enhance the health status of the society.
4. Achieve international recognition as a center for high quality medical education and research as evidenced by high listing in international academic rankings.
5. Be readily identified internationally with the values we espouse – high standards of quality, equality, justice, transparency, efficiency and integrity.



## HBMCDM Goals and Objectives

No.	GOALS	OBJECTIVES
GOAL 1	Provide dental specialty training	<ol style="list-style-type: none"> <li>1. Provide competency based training.</li> <li>2. Will encourage evidence-based practice.</li> <li>3. Integrate basic, medical, behavioral and dental sciences in all curricula.</li> <li>4. Develop new programs/courses.</li> </ol>
GOAL 2	Deliver curricula that meet national and international standards	<ol style="list-style-type: none"> <li>1. Affiliate and collaborate with dental educational centers of excellence</li> <li>2. Include core knowledge across all dental specialties and ensure that all students have the corequisite basic sciences, clinical competency and research skills.</li> <li>3. Provide dental curricula that will foster an interdisciplinary appreciation by the students.</li> <li>4. Align academic programs with international curricula for clinical specialist training.</li> <li>5. Align curricula with the eligibility requirements to sit internationally recognized clinical specialty examinations.</li> </ol>
GOAL 3	Provide patient centered care	<ol style="list-style-type: none"> <li>1. Position HBMCDM and DDH as a center of dental excellence.</li> <li>2. Deliver care through multidisciplinary clinical teams.</li> <li>3. Empower and involve of patients in their oral health.</li> <li>4. Monitor patient satisfaction.</li> <li>5. Ensure that patient complaints are dealt with effectively and efficiently.</li> <li>6. Provide community programs in oral health education.</li> </ol>

No.	GOALS	OBJECTIVES
GOAL 4	Embed research to foster evidence based practice and improve patient care.	<ol style="list-style-type: none"> <li>1. Focus on clinical problems relevant to the country and the region.</li> <li>2. Attract faculty with a research track record.</li> <li>3. Collaborate with internationally renowned researchers and industry leaders.</li> <li>4. Support and provide adequate time and resources for research that is aligned with the research mission of the college.</li> <li>5. Encourage students to conduct research and publish.</li> <li>6. Strengthen research capacity at the college.</li> </ol>
GOAL 5	Harness technology and innovation in teaching and learning.	<ol style="list-style-type: none"> <li>1. Encourage the use of technology by students such as the use of electronic learning management systems.</li> <li>2. Promote and reward excellence in teaching.</li> <li>3. Provide academic development education and research.</li> </ol>
GOAL 6	Develop quality assurance to ensure the goals and objectives are met.	<ol style="list-style-type: none"> <li>1. Perform annual reviews of institutional governance, policies and procedures.</li> <li>2. Performs annual reviews of programs to ensure adherence to their goals and objectives.</li> <li>3. Conduct regular evaluation of faculty, students, clinical instructors and other relevant staff.</li> <li>4. Develop an alumni relations committee.</li> <li>5. Gain feedback from employers on the knowledge and skills of graduates and the need for new programs.</li> </ol>

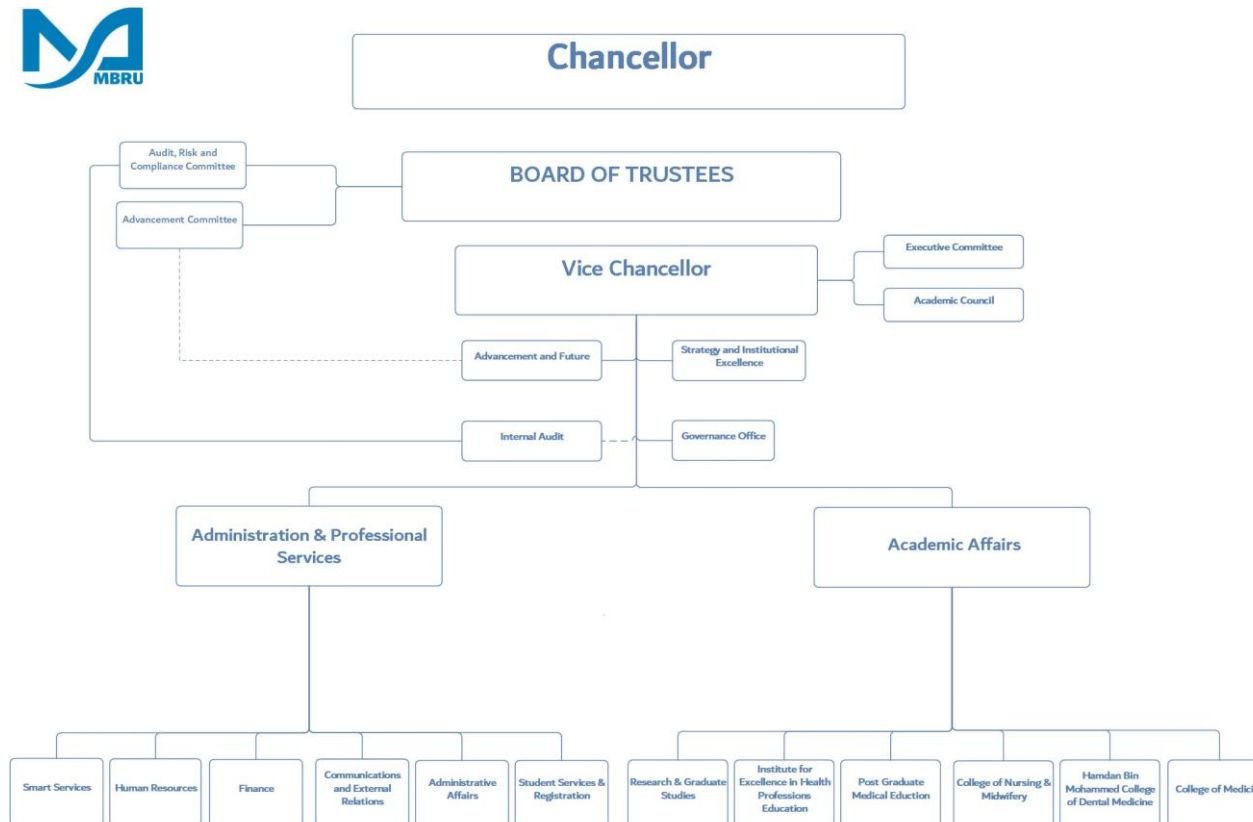
#### 4. MBRU Statement of Licensure and Accreditation

MBRU, located in the Emirate of Dubai, is officially licensed to award degrees and qualifications in higher education by the Ministry of Higher Education and Scientific Research of the UAE from 15 December 2014.

## 5. The Organization

### 5.1. MBRU Structure

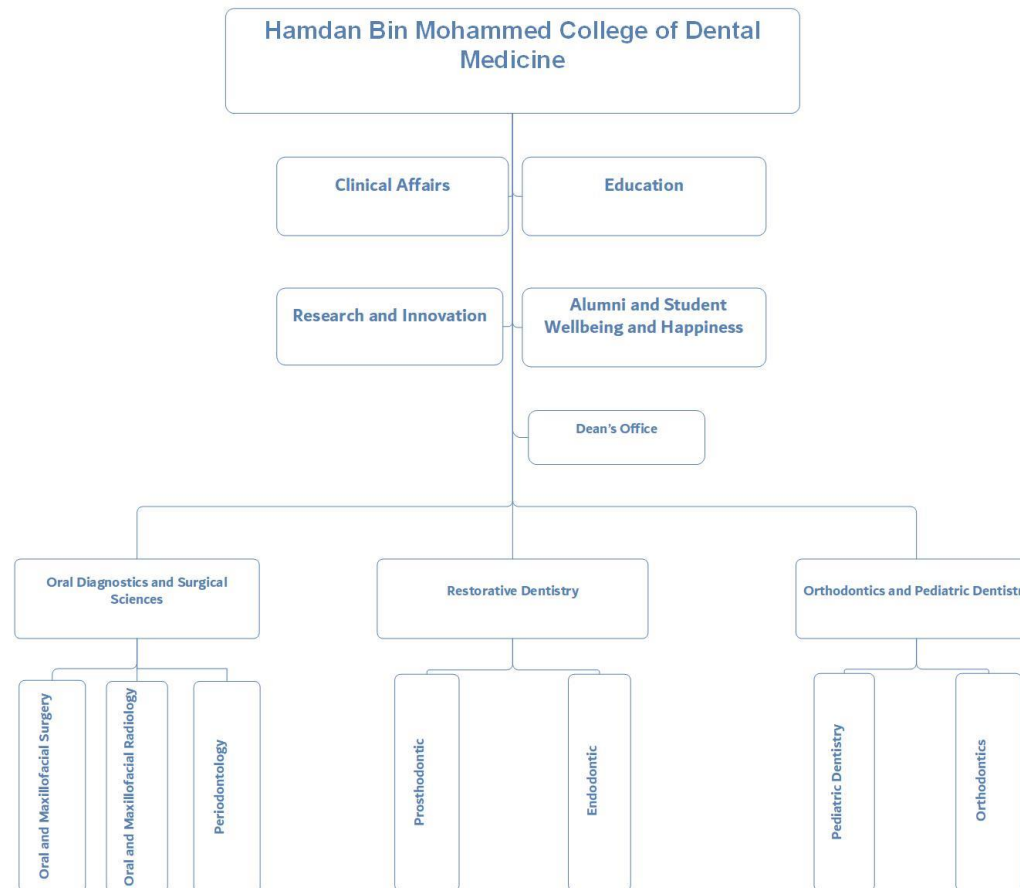
The structure of the university is shown in the chart below. The University Council is the highest ruling body within the university and equates to “The Board” in the Commission for Academic Accreditation Standards.



## 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

The table below provides a summary of available learning facilities at MBRU.

Venue	AV/IT	Additional Comments
<b>Building 34</b>		
Lecture Hall	Ultra-Wide Screen Video Conferencing Audio Conferencing	20 – 30 seats
2 small meeting rooms	TV Screen	10 Seats each
63 Dental Chairs		
Dental Lab		
<b>Building 14</b>		
<b>Basement 1 Right</b>		
KHMSC Accident & Emergency	IP Camera	Simulation
<b>Ground Floor Right</b>		
Case Method Hall	Ultra-Wide Screen Video Conferencing Audio Conferencing Lecture Capture	75 – 85 Seats
Anatomy Dissection Hall	10 TV Screens 2 Projections Content Sharing with Case Method Hall	10 Tables
Ahmed Siddiqui Auditorium	Wide Screen Video Conferencing	330 Seats
<b>First Floor Right Wing</b>		
Lecture Hall 1 & 2	Dual Rear Projection	40 – 50 Classroom
Lecture Hall 3	Single Front Projection	40 Classroom
Lecture Hall 4	Dual Rear Projection Video Conferencing	60 – 70 Classroom
Lecture Hall 5	Dual Rear Projection	60 – 70 Classroom
Case Method Hall	Dual Rear Projection Video Conferencing Audio Conferencing Lecture Capture	65 Seats

Small Meeting Rooms 1 & 2	TV Screen	6 – 10 Seats
Video Conference Room	Video Conferencing	6 – 8 Seats
<b>First Floor Left Wing</b>		
AMML Meeting Room 1 & 2	TV Screen	8 – 10 Seats
<b>Second Floor Right Wing</b>		
KHMSC Dental Simulation	Nil	Simulation
KHMSC Training Room	Portable Screen & Projector	40 Classroom
KHMSC Ward	IP Camera	Simulation
KHMSC ICU	IP Camera	Simulation
KHMSC OR	IP Camera	Simulation
KHMSC Debriefing Room	Portable Screen & Projector	
KHMSC Part Task Trainer Room	Nil	Simulation
<b>Second Floor Left Wing</b>		
AMML Group Study Rooms 1-7	Interactive TV's	6 – 10 Seats
<b>Third Floor Right Wing</b>		
Lecture Halls 6 -11	Provisions Only (Front Projection Screens Planned)	30 – 35 Seats in each hall
Tutorial Rooms 1-10	Provisions Only (TV's Planned)	8 Seats in each room
Clinical Consulting Rooms 1 -12	Provisions Only (IP Cameras, TV's Planned)	Simulation
<b>Fourth Floor Left Wing</b>		
Computer Lab	70 Desktops 1 Front Projection Screen (Right Side)	Computer Based Teaching - Pathology, Histology, Biochemistry, Pharmacology & Molecular Biology Computer Examination Center
Multidisciplinary Lab	Nil	Wet Lab - Biochemistry, Physiology, Pharmacology & usage of wet biological specimens.
Computer Assisted Lab	2 Interactive Displays	Physiology Practicals Biochemistry Demonstrations Molecular Biology Pathology

## **6.1. Physical Teaching Resources and Facilities**

### 6.1.1 Class Rooms

6.1.1.1 The Mohammed Bin Rashid Academic Medical Center is the home base for MBRU. Currently, it houses multiple large classrooms accommodating up to 100 students. Most classrooms are equipped with double presentation screens and up to date audiovisual equipment. There is also electronic connectivity to the large 350-seater auditorium, with an internet port connection for each student.

6.1.1.2 In addition, 10 tutorial rooms each accommodating 8-10 students and the tutor will be added for small group learning.

6.1.1.3 HBMCDM has wireless connection to the Internet. The students are expected to bring to class either an electronic tablet or a laptop.

### 6.1.2 Case Demonstrations

MBRU houses two state-of-the-art case method - horse-shoe shaped classroom designed for case demonstrations. Each can accommodate 65 students. The acoustics are such that the speaker in the central part is clearly audible in all parts of the hall without the need for a microphone. The hall has connectivity to the main 350-seater auditorium.

### 6.1.3 Teaching Laboratories

MBRU hosts three teaching laboratories. Each can accommodate 50 students at a time. A 'dry' teaching laboratory is dedicated for projection and demonstrations in Histology, Pathology, and Microbiology. The 'wet' teaching laboratory is for practical sessions in subjects that involve wet preparations.

### 6.1.4 Computer Assisted Learning Laboratory

MBRU has a 60-station computer laboratory designed for teaching through digital microscopy.

### 6.1.5 Anatomy Dissecting Room

MBRU has a dissecting room that has 10 dissecting tables (each accommodating 8 students), a morgue for cadavers and body parts, a storage facility, student lockers, two debriefing rooms, two faculty offices, technician offices, and a case method hall for demonstrations.

## 6.2. Clinical Teaching Facilities

### 6.2.1 Simulation and Clinical Skills Training Center

The Khalaf Ahmad Al Habtoor Medical Simulation Center (KHMSC), located on the second floor of the academic building is a training facility where healthcare professionals receive training to improve skills and develop competencies. KHMSC, a 19,500 sq. ft. facility, has all the elements of a virtual hospital. It has two fully functional Operating Rooms; four ICU Bays - including a pediatric bay; and a ward, three debriefing rooms, a small meeting room and a large training room on the second floor. There is a large room for skills training (e.g. intravenous cannulation, endotracheal intubation, lumbar puncture). A complete Emergency Room with imaging facilities is in the basement.

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.

### 6.2.2 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.

### 6.2.3 Academic Medical Centers

MBRU is located at the heart of Dubai Healthcare City which currently houses over 150 medical facilities, 4,000 physicians and three full size hospitals that are fully operational and open to patients. MBRU has already developed memoranda of understanding with key providers in DHCC (BR Medical suites, Mediclinic City Hospital and Al Jalila Children's



Specialty Hospital).

### 6.3. Library Resources

The Al Maktoum Medical Library is housed in MBR- Academic Medical Centre, Building 14. In addition to serving MBRU and its component Colleges, the library has the capacity to serve the medical community of DHCC.

The library is a modern 30,000 square feet facility. It houses a large collection of clinical and professional development resources (both electronic and print collection). The library has 2,300 print books added to extensive databases, more than 7,000 electronic journals, and 5,000 electronic books. The databases and electronic resources are accessible by remote connection. The Library has developed an extensive network for sharing educational resources and journals with other libraries in the region.

Library opening hours are listed below:

Sundays – Wednesdays	8.00 am – 9.30 pm
Thursdays	8.00 am – 5.00 pm
Saturdays	8.30 am – 4.00 pm
Fridays and Public Holidays	Closed

New students receive an induction into using the library and its online facilities as part of orientation, and librarians are available throughout the academic year to help students locate and use the facilities they require. The regulations for use of the Library Facilities are available in the *Student Handbook*. Library services include reference service, photocopying and printing facilities, library training and orientations, and document request and delivery.

The Al Maktoum Medical Library has 18 Core Databases including Acland Anatomy, Visible Body, BMJ Clinical Summaries and Web of Science.

### 6.4. Educational Technology

- 6.4.1. e-Learning Management System (LMS): The university has subscribed to 'Desire2Learn' as the platform for the LMS.
- 6.4.2. Registration and enrollment: All students, faculty, and human resources management records will be on an electronic platform called 'PowerCampus'.
- 6.4.3. Examsoft platform is used for conducting electronic examinations, archiving question banks and analyzing results.

## 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.

### 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 and The University of Jordan. 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. Through RCSEd regulations, successful graduates from HBMCDM are also automatically eligible to apply for FDS without examination five years after obtaining their Membership qualification.

## 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 3.00 on a scale of 4.00 OR Average of 75%. Applicants with cGPA between 2.00 - 2.99 OR Average of 70 – 74.99% may be considered.
- A minimum TOEFL score (iBT) minimum 80; computer minimum 213; or IETLS score 6.0.
- Minimum of one year Internship or of any other clinical practice.
- Multi-Mini Interviews (MMIs) are conducted as part of the selection process at HDMCDM (see *Student Handbook*).
- 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](http://www.mbruniversity.ac.ae)
- MBRU's admissions policy and procedures is detailed in the *Student Handbook*.

## 8.2. Transfer of credit

A transfer admission request shall be considered if the student is in good academic standing at his/her transferred institution and should not hold a GPA of less than 3.0 (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 Readmission 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 during the course of an academic term, or to break their continuous enrollment in regular academic terms, may apply for re-enrollment, contingent upon the following:

- The student is in good academic standing
- The student applies for re-enrollment within two years from the beginning of the first academic term of the break in registration
- The university has not dismissed the student for academic or disciplinary reasons

Students on suspension may apply for re-enrollment following completion of the period of suspension

## 10. Financial Policies

The Department of Student Services and Registration (DSSR) in collaboration with the Finance Department, 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.

### 10.1. Tuition Fees

10.1.1 The university publishes tuition fees annually and a schedule of payment. Any changes in tuition fees is 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 2020-2021:

**HBMCDM Schedule of Fee for Academic Year 2020 - 2021 is set out below:**

2020 - 2021	International Student	UAE & GCC*	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 26th, 2020
Total annual tuition fee	AED 185,000	AED 160,000	

\*GCC: Gulf Cooperation Council

## 11. Student Services & Registration

The Department of Student Services and Registration (DSSR) at MBRU provides assistance to students in fields of admissions, scheduling, registration, student records, counseling, accommodation, student events, activities, sports and recreation, career development, student support and alumni.

DSSR 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 conduct in the classroom.

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.
- 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 infraction 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 seven consecutive 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*.

## 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 Services Manual*.

### 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.

Please refer to the Graduation Policy in the *Student Services Policy Manual* for more information.

### **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)

	NQF Emirates PLOs (Level 9)	HBMCDM Program Learning Outcomes (PLOs)									
		PLO A1	PLO A2	PLO A3	PLO B1	PLO B2	PLO B3	PLO B4	PLO C1	PLO C2	PLO C3
<b>A. Knowledge (K)</b>											
<b>9K1.</b>	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	√	√	√			√	√	√		
<b>9K2.</b>	Advanced knowledge of applicable research principles and methods		√	√	√	√					
<b>9K3.</b>	Critical awareness of knowledge issues, as the basis for original thinking; encompassing appropriate processes of enquiry and current processes of knowledge production	√		√	√					√	√
<b>9K4.</b>	Detailed body of knowledge of recent developments in a field of work, and/or discipline	√		√	√	√	√	√		√	√

B. Skills (SK)											
<b>9SK1</b>	Advanced skills required in research, analysis, evaluation and/or innovation of complex ideas, information, concepts and/or activities		√	√	√	√					
<b>9SK2</b>	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				√	√	√	√		√	√
<b>9SK3</b>	Advanced problem-solving skills 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	√	√	√		√	√	√		√	
<b>9SK4</b>	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		√	√		√					
<b>9SK5</b>	Highly developed specialist communication and information technology skills to present, explain and/or critique highly complex matters		√		√				√		

<b>C. Autonomy and responsibility (AR)</b>											
<b>9AR1</b>	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	√	√		√		√		√		
<b>9AR2</b>	Can account for high level governance of processes and systems	√							√		
<b>9AR3</b>	Can analyze and reflect on socio-cultural norms and relationships and act to build and transform them	√		√	√				√		
<b>D. Role in context (RC)</b>											
<b>9RC1</b>	Can initiate and manage professional activities that may include a highly complex environment			√	√						
<b>9RC2</b>	Can take responsibility for leading the strategic performance and development of professional teams and self								√	√	
<b>E. Self-Development (SD)</b>											
<b>9SD1</b>	Can self-evaluate and take responsibility for contributing to professional knowledge and practice including unfamiliar learning contexts		√			√				√	√

<b>9SD2</b>	Can develop and implement further learning consistently and sensitively		√							√	
<b>9SD3</b>	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

Courses	Course Code	HBMCDM Program Learning Outcomes (PLOs)									
		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		P			P				
CLO1		x		x			x				
CLO2		x		x			x				
CLO3		x		x			x				
CLO4		x		x			x				
CLO5		x		x			x				
Clinical Governance, Legislation & Ethics	CC503	F	P				F		F	P	
CLO1		x	x				x		x		
CLO2		x								x	
CLO3		x									
CLO4			x							x	
CLO5							x				

Research Methodology and Biostatistics	CC502	P	P	P	F	F				P	P
CLO1				x							
CLO2					x	x					
CLO3					x	x					
CLO4		x	x	x	x	x					
CLO5		x	x	x	x	x				x	
CLO6		x	x	x	x	x					x
Applied Basic Sciences II	CC511	F		P			P				
CLO1		x		x			x				
CLO2		x		x							
CLO3		x		x							
CLO4				x			x				
CLO5		x		x							
Oral Epidemiology	CC508	F	F	F	F	F					P
CLO1					x	x					
CLO2		x			x	x					
CLO3		x	x	x							x
CLO4		x	x	x							x
CLO5					x	x					

<b>Radiology and Imaging</b>	<b>CC509</b>	<b>F</b>	<b>P</b>	<b>F</b>	<b>P</b>	<b>P</b>		<b>P</b>	<b>P</b>	<b>F</b>	<b>P</b>
CLO1		x	x	x		x		x	x	x	x
CLO2		x	x	x	x	x		x			
CLO3		x	x	x				x			
CLO4		x	x	x	x	x				x	
CLO5		x	x	x		x		x			
CLO6		x	x	x		x		x			
<b>Molecular Biology</b>	<b>CC504</b>	<b>F</b>	<b>P</b>		<b>P</b>	<b>F</b>		<b>P</b>	<b>P</b>	<b>F</b>	<b>P</b>
CLO1		x	x		x	x		x	x		
CLO2		x	x		x	x		x			x
CLO3		x	x		x	x		x	x		x
CLO4					x	x		x			
CLO5		x	x					x			x
CLO6		x	x					x	x	x	x



**17.3.2. Endodontics Program Learning Outcomes**

Courses	Course Code	HBMCDDM Program Learning Outcomes (PLOs)									
		PLO 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	P	P	F	P	P	F
CLO1		x	x	x	x	x	x	x	x	x	x
CLO2		x	x	x	x	x	x	x	x	x	x
CLO3		x	x	x	x	x	x	x	x	x	x
CLO4		x	x	x	x	x		x	x		x
CLO5		x	x		x			x			x
CLO6		x	x		x			x			x
Specialty Clinical Training- Clinical Skill Facility	EN842	F	F	P	F	P	P	F	P	P	F
CLO1		x	x	x	x			x	x	x	x
CLO2		x	x	x	x	x	x	x	x	x	x
CLO3		x	x	x	x				x	x	x
CLO4		x	x			x					x
CLO5		x	x	x	x	x					x
CLO6		x	x	x	x	x		x			x
CLO7		x									x
CLO8		x									x
Specialty Clinical Training- Clinic	EN837, 838, 839	F	F	F	P	P	F	F	F	F	F

CLO1		x	x	x		x	x	x	x		x
CLO2		x	x	x	x	x	x	x	x		x
CLO3		x	x	x	x	x	x	x	x		x
CLO4		x	x	x		x	x	x	x		
CLO5		x	x	x			x	x	x		
CLO6		x	x	x			x	x	x		
CLO7		x	x	x	x		x	x	x		x
CLO8		x	x	x			x	x	x	x	
CLO9		x	x	x	x		x	x	x	x	x
CLO10		x	x	x			x	x	x	x	
Treatment Strategies and Plans in Endodontics & Pulp Therapy	EN843	F	F	F	F	P	P	F	P	P	F
CLO1		x	x	x	x	x	x	x			x
CLO2		x	x	x	x	x	x	x			x
CLO3		x	x	x	x		x	x		x	x
CLO4		x	x				x	x	x		x
CLO5		x	x				x	x			x

Scientific Literature	EN821, 822, 823, 824 825, 826	F	P	F	F	P			P	F	F
CLO1		x	x	x	x				x		x
CLO2		x	x	x	x	x			x		x
CLO3		x	x	x	x				x	x	x
CLO4		x		x	x				x	x	x
CLO5		x		x	x	x				x	x
CLO6		x		x						x	x
Research Dissertation	EN812, 813, 814, 815, 816	F	F	F	F	F			P	P	P
CLO1		x	x	x	x	x			x		x
CLO2		x	x	x	x	x			x	x	x
CLO3		x	x	x	x	x			x	x	x
CLO4		x	x	x	x	x			x	x	x
CLO5		x	x	x	x	x			x		
CLO6		x	x	x	x	x			x		
CLO7		x	x	x	x	x				x	x
CLO8		x	x	x	x	x					
CLO9		x	x	x	x	x			x	x	x
CLO10		x	x	x	x	x			x	x	x

Non-Surgical Root Canal Treatment	EN844	F	F	F	F	P	P		P	P	F
CLO1		x	x	x	x	x	x				x
CLO2		x	x	x	x					x	x
CLO3		x	x	x	x		x				x
CLO4		x	x	x					x		x
Periodontology and Prosthodontics for Endodontic Specialists	EN854	F	F	P	P	P	P	F	P	P	F
CLO1		x	x	x		x		x			x
CLO2		x	x	x		x		x	x	x	x
CLO3		x	x	x	x			x			x
CLO4		x	x	x			x	x	x	x	x
CLO5		x	x					x			
CLO6		x	x		x			x			
Non-Surgical Root Canal Retreatment	EN846	F	F	F	F	P	P	F	P	P	F
CLO1		x	x	x	x		x	x	x		x
CLO2		x	x	x	x	x		x	x		x
CLO3		x	x	x	x						x
CLO4		x	x	x	x					x	x

Microbiology	EN852	F	P	F	F	P	F			F	F
CLO1		x	x	x	x	x					
CLO2		x	x	x	x	x					x
CLO3		x	x	x	x	x					
CLO4		x	x	x			x				x
CLO5		x		x			x			x	x
Surgical Root Canal Treatment	EN849	F	F	F	F	P	P	F	P	P	F
CLO1		x	x	x	x	x	x	x			x
CLO2		x	x	x	x	x	x	x	x	x	
CLO3		x	x	x	x		x	x			
CLO4		x	x	x			x				
CLO5		x	x	x	x	x					
CLO6		x	x	x		x	x	x	x	x	
Dental Traumatology	EN850	F	F	F	F	P	P	F	P	P	F
CLO1		x	x	x	x	x	x	x	x		x
CLO2		x	x	x	x		x	x	x		x
CLO3		x	x	x	x			x			x
CLO4		x	x	x		x	x	x			x
CLO5		x	x	x				x	x	x	

Consolidation of Endodontic Training	EN853	F	P	P	P	P	F	F	P	P	P
CLO1		x					x	x	x		x
CLO2		x	x	x	x	x	x	x	x	x	x
CLO3		x					x	x	x		x
CLO4		x					x	x			x
CLO5		x			x	x	x	x			x
CLO6		x					x				

**Decide how much a course contributes to the overall program outcomes**

Fully (F)

Partly (P)

### 17.3.3. Orthodontics Program Learning Outcomes

Courses	Course Code	HBMCDM Program Learning Outcomes (PLOs)									
		PLO A1	PLO A2	PLO A3	PLO B1	PLO B2	PLO B3	PLO B4	PLO C1	PLO C2	PLO C3
Temporomandibular disorders	PR366	F	P	F	P	F		P	P	F	P
CLO1		x	x	x							
CLO2		x	x	x	x	x		x	x	x	x
CLO3		x	x	x				x	x	x	x
CLO4		x	x	x	x			x	x	x	x
CLO5			x			x					
CLO6		x	x	x	x	x		x	x	x	x
CLO7		x	x	x	x	x		x	x	x	x
CLO8		x		x	x				x	x	x
CLO9		x		x	x				x	x	x
CLO10		x		x	x	x			x		x
Research Dissertation	OR611/612/613/ 614/615/616	F	F	F	F	F			P	P	P
CLO1		x	x	x	x	x			x		x
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		x	x	x	x	x			x		x
CLO7		x	x	x	x	x			x	x	x
CLO8		x	x	x	x	x			x	x	x

CLO9		x	x	x	x	x			x	x	x
CLO10		x	xx	x	x	x			x	x	x
Scientific Literature	OR621/622/623/ 624/625/626	F	P	F	F	P	P	P	P	F	F
CLO1		x	x		x	x	x	x			
CLO2						x	x	x	x		
CLO3		x	x	x	x	x	x		x	x	x
CLO4		x	x	x		x	x		x	x	x
CLO5					x	x	x	x	x	x	x
CLO6		x	x	x	x			x	x	x	x
Specialty Clinical Training	OR637/638/639	F	F	F	P	P	F	F	F	F	F
CLO1		x	x	x				x	x	x	x
CLO2		x	x	x				x	x	x	x
CLO3		x	x	x						x	x
CLO4		x	x	x		x					
CLO5		x	x	x				x	x		
CLO6		x	x	x		x				x	x
CLO7		x	x	x				x	x	x	x
CLO8		x	x	x				x	x		
Clinical Skills	OR641	F	F	F			F	F	F	F	P
CLO1		x	x	x			x	x	x	x	x
CLO2		x	x	x				x	x	x	x
CLO3		x	x	x			x	x	x	x	x



Basic Science Relevant to Orthodontics	OR642	F	P	F	P	F		P	P	F	P
CLO1		x	x	x	x	x		x	x	x	x
CLO2		x	x	x	x	x		x	x	x	x
CLO3		x	x	x	x	x		x	x	x	x
CLO4		x	x	x	x	x		x	x	x	x
CLO5		x	x	x	x	x		x	x	x	x
Orthodontic Diagnosis and Treatment Planning	OR643	F	F	F	P	P		F	F	P	F
CLO1		x	x	x				x	x	x	x
CLO2		x	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		x	x	x	x	x		x		x	x
CLO7		x	x	x	x	x		x	x	x	x
CLO8		x	x	x				x	x	x	x
Growth Assessment - Cephalometric Methods for Assessment of Dentofacial Changes	OR644	F	P	P	F	P		F	F		P
CLO1		x	x	x	x	x		x	x		x
CLO2		x	x	x	x	x		x	x		x
CLO3		x	x	x	x	x		x	x		x
CLO4		x	x	x	x	x		x	x		x
CLO5		x	x	x	x	x		x	x		x
CLO6		x	x	x	x	x		x	x		x

CLO7		x	x	x	x	x		x	x		x
Dentofacial Orthopedics and Temporomandibular Dysfunction	OR655	F	P	P	F	P	F	F			P
CLO1		x	x	x	x	x	x	x			x
CLO2		x	x	x	x	x	x	x			x
CLO3		x	x	x	x	x	x	x			x
CLO4		x	x	x	x	x	x	x			x
CLO5		x	x	x	x	x	x	x			x
CLO6		x	x	x	x	x	x	x			x
CLO7		x	x	x	x	x	x	x			x
CLO8		x	x	x	x	x	x	x			x
CLO9		x	x	x	x	x	x	x			x
Orthodontic Materials and Appliances	OR656	F	F	F	F	P	F	F			P
CLO1		x	x	x	x	x	x	x			x
CLO2		x	x	x	x	x	x	x			x
CLO3		x	x	x	x	x	x	x			x
CLO4		x	x	x	x	x	x	x			x
CLO5		x	x	x	x	x	x	x			x
CLO6		x	x	x	x	x	x	x			x
CLO7		x	x	x	x	x	x	x			x
CLO8		x	x	x	x	x	x	x			x
CLO9		x	x	x	x	x	x	x			x

Craniofacial Development and Cephalometric Assessment	OR647	F	F	F	F	P	F	F	F		P
CLO1		x	x	x	x	x	x	x	x		x
CLO2		x	x	x	x	x	x	x	x		x
CLO3		x	x	x	x	x	x	x	x		x
CLO4		x	x	x	x	x	x	x	x		x
Long-term Effects of Orthodontic Treatment - Iatrogenic Effects of Orthodontic Treatment	OR648	F	F	F	P		F	F			P
CLO1		x	x	x	x		x	x			x
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		x	x	x	x		x	x			x
CLO7		x	x	x	x		x	x			x
Orthodontic Tooth Movement and Biomechanics	OR657	F	F	P			F	F	P		
CLO1		x	x	x			x	x	x		
CLO2		x	x	x			x	x	x		
CLO3		x	x	x			x	x	x		
CLO4		x	x	x			x	x	x		
CLO5		x	x	x			x	x	x		
Adult Orthodontics	OR650	F	F	F			F	F	P		
CLO1		x	x	x			x	x	x		
CLO2		x	x	x			x	x	x		

CLO3		x	x	x			x	x	x		
CLO4		x	x	x			x	x	x		
CLO5		x	x	x			x	x	x		
Orthodontic Techniques	OR658	F	F	F			F	F	F		
CLO1		x	x	x			x	x	x		
CLO2		x	x	x			x	x	x		
CLO3		x	x	x			x	x	x		
CLO4		x	x	x			x	x	x		
CLO5		x	x	x			x	x	x		
CLO6		x	x	x			x	x	x		
CLO7		x	x	x			x	x	x		
CLO8		x	x	x			x	x	x		
CLO9		x	x	x			x	x	x		
Guiding the Development of the Occlusion	OR652	F	F	F	P		F	F	F		P
CLO1		x	x	x	x		x	x	x		x
CLO2		x	x	x	x		x	x	x		x
CLO3		x	x				x	x	x		x
CLO4		x	x	x	x				x		x
CLO5		x	x	x	x				x		x
CLO6		x	x	x	x		x	x	x		x
CLO7		x	x				x	x	x		x
CLO8		x	x				x	x	x		x
CLO9		x	x	x	x		x	x	x		
CLO10		x	x	x	x		x	x	x		

Multidisciplinary Treatment Modalities	OR653	F	F	F	P		F	F	F	P	F
CLO1		x	x	x	x		x	x	x	x	x
CLO2		x	x	x	x		x	x	x	x	x
CLO3		x	x	x	x		x	x	x		x
CLO4		x	x	x	x		x	x	x		x
CLO5		x	x	x	x		x				x
CLO6		x	x	x	x		x				x
CLO7		x	x				x	x	x	x	x
CLO8		x	x				x	x	x	x	x
CLO9		x	x	x	x		x	x	x	x	x
CLO10		x	x	x	x						x
CLO11		x	x	x	x						x
CLO12		x	x				x	x	x		x
CLO13		x	x	x	x		x	x	x		x
Consolidation of Orthodontic Training	OR659	F	P	P	P	P	F	F	P	P	P
CLO1		x	x	x	x	x	x	x	x	x	x
CLO2		x	x	x	x	x	x	x	x	x	x
CLO3		x	x	x	x	x	x	x	x	x	x

**Decide how much a course contributes to the overall program outcomes**

Fully (F)

Partly (P)

**17.3.4. Pediatric Dentistry Program Learning Outcomes**

Courses	Course Code	HBMCMDM Program Learning Outcomes (PLOs)									
		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	P	P	F	F	P	F	P
CLO1		x	x	x			x		x	x	
CLO2		x	x	x	x	x	x		x	x	
CLO3		x	x	x			x				
CLO4		x	x	x			x	x	x	x	x
CLO5		x	x	x			x	x	x		
Restorative Techniques	PD442	F	F	F	P	P	F	F	P	F	P
CLO1		x	x	x				x	x		
CLO2		x	x	x	x	x	x	x	x	x	x
CLO3		x	x	x				x	x	x	x
Scientific Literature	PD421/422/423/ 424/425/426	F	P	F	F	P	P	P	P	F	F
CLO1		x			x	x	x	x			
CLO2					x	x	x	x			
CLO3		x	x	x	x	x	x	x	x	x	x
CLO4					x	x	x	x			
CLO5					x	x	x	x	x		
CLO6		x	x	x	x			x	x	x	x

Specialty Clinical training including Clinical Skills Lab	PD437/438/439	F	F	F	P	P	F	F	F	F	F
CLO1		x	x	x							
CLO2		x	x	x				x	x		
CLO3		x	x	x						x	x
CLO4		x	x	x							
CLO5		x	x	x				x	x		
CLO6		x	x	x				x			
CLO7		x	x	x					x		
CLO8		x	x	x				x	x	x	x
CLO9		x	x	x				x	x		
CLO10		x	x	x			x	x	x	x	x
CLO11							x	x	x	x	x
CLO12		x	x	x	x	x	x				
CLO13									x	x	x
Research Dissertation	PD411/412/413/ 414/415/416				F	F			P	P	P
CLO1					x	x					
CLO2					x	x					
CLO3					x	x					
CLO4					x	x					
CLO5					x	x					x
CLO6					x	x			x		
CLO7					x	x					
CLO8					x	x					
CLO9					x	x					

CLO10					x	x			x	x	
Orthodontic Diagnosis and Treatment Planning	OR643	F	F	F	P	P	P	F	P	F	P
CLO1		x	x	x	x		x	x	x		
CLO2					x	x	x	x			
CLO3		x	x	x			x	x	x		
CLO4		x	x	x					x	x	x
Pediatric Oral Pathology and Medicine	PD443	F	F	F			F	F	P	F	P
CLO1		x	x	x			x	x	x		
CLO2		x	x	x			x	x			
CLO3		x	x	x				x	x		
CLO4		x	x	x				x	x	x	x
Orthodontics for the Pediatric Dentists	PD444	F	F	F	P	P	F	F	P	F	P
CLO1		x	x	x	x	x	x	x	x	x	x
CLO2		x	x	x	x	x		x			
CLO3		x	x	x				x			
CLO4		x	x	x	x	x	x	x	x	x	x
Behavioral Science	PD446	F	F	F	P	P	F	F	P	F	P
CLO1		x	x	x	x	x		x	x		
CLO2		x	x	x					x		
CLO3		x	x	x			x	x			
CLO4		x	x	x			x	x	x		
CLO5		x						x	x	x	
CLO6		x	x	x	x	x	x	x	x	x	x



General Pediatrics	PD445	F	F	F	P	P	F	F	P	F	P
CLO1		x	x	x	x	x	x	x	x	x	x
CLO2		x	x	x	x		x	x	x		
CLO3		x	x	x	x		x	x			
Basic Sciences in Pediatric Dentistry	PD450	F	F	F	P	P	P	F	P	F	P
CLO1		x	x	x	x	x	x	x	x	x	x
CLO2		x	x	x	x		x	x	x		
CLO3		x	x	x	x		x	x			
Dental Traumatology	PD451	F	F	F	P	P	F	F	P	F	P
CLO1		x	x	x			x				
CLO2		x	x	x			x	x			
CLO3		x	x	x	x	x	x	x			
CLO4		x	x	x	x	x	x	x	x		
CLO5		x	x	x				x	x	x	x
Prevention of Oral Disease	PD448	F	F	F	P	P	F	F	P	F	P
CLO1		x	x	x			x				
CLO2		x	x	x	x	x					
CLO3		x	x	x				x	x	x	x
CLO4		x	x	x				x	x	x	
CLO5		x	x	x		x		x	x	x	
Consolidation of Pediatric Dentistry Training 1 & 2	PD454/455	F	P	P	P	P	F	F	P	F	F
CLO1		x	x	x	x	x	x	x	x	x	x
CLO2		x	x	x	x	x	x	x	x	x	x
CLO3		x	x	x	x	x	x	x	x	x	x

CLO4		x	x	x	x	x	x	x	x	x	x	x
CLO5		x	x	x	x	x	x	x	x	x	x	x

**Decide how much a course contributes to the overall program outcomes**

Fully (F)

Partly (P)

**17.3.5. Periodontology Program Learning Outcomes**

Courses	Course Code	HBMCDM Program Learning Outcomes (PLOs)									
		PLO A1	PLO A2	PLO A3	PLO B1	PLO B2	PLO B3	PLO B4	PLO C1	PLO C2	PLO C3
Basic Biological Science Relevant to Periodontics	PE241	F	F	F	F	P	P	F	P	P	F
CLO1		x			x		x				x
CLO2		x	x			x	x				x
CLO3				x				x		x	
CLO4		x			x					x	
CLO5		x	x	x			x	x	x		x
CLO6		x								x	
CLO7		x			x	x		x		x	x
CLO8		x		x	x		x	x	x		x
Specialty Clinical Training- Clinic	PE237/238/239	F	F	F	P	P	F	F	F	F	F
CLO1		x	x				x	x	x	x	x
CLO2			x	x		x		x	x	x	x
CLO3		x	x	x	x	x		x	x		x
CLO4		x	x	x		x	x	x	x		x
CLO5		x	x		x			x	x		
CLO6		x	x	x	x		x	x	x	x	x
CLO7		x	x	x	x	x	x	x	x	x	x
CLO8		x	x	x		x		x	x		
CLO9		x	x	x	x	x	x	x	x	x	x
CLO10		x	x				x	x	x	x	x

CLO11			x	x		x		x	x	x	x
CLO12		x	x	x	x	x		x	x		x
CLO13		x	x	x		x	x	x	x		x
CLO14		x	x		x			x	x		
Diagnosis and Treatment Planning in Periodontics	PE243	F	F	F	F	P	P	F	P	P	F
CLO1		x			x		x				x
CLO2		x	x			x	x				x
CLO3				x				x		x	
CLO4		x			x					x	
CLO5		x	x	x			x	x	x		x
CLO6		x								x	
CLO7		x			x	x		x		x	x
Research Dissertation	PE211/212/213 214/215/216	F	F	F	F	F			P	P	P
CLO1		x	x		x	x			x		x
CLO2			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		x	x	x	x	x			x	x	x
CLO7			x	x	x	x				x	x
CLO8		x	x	x	x	x			x	x	x
CLO9		x	x	x	x					x	x
CLO10			x		x	x			x	x	x

Scientific Literature	PE221/222/223/ 224/225/226	F	P	F	F	P	P	P	P	F	F
CLO1		x	x		x	x	x		x		x
CLO2			x	x		x		x		x	
xCLO3		x	x	x	x	x	x	x		x	x
CLO4		x	x	x	x		x		x	x	x
CLO5		x		x	x	x	x	x	x	x	x
CLO6		x	x	x	x	x		x	x	x	x
CLO7			x	x	x	x	x			x	x
CLO8		x	x	x	x	x	x		x	x	x
CLO9		x	x	x	x			x		x	x
CLO10			x		x	x	x	x	x	x	x
CLO11		x	x		x	x	x	x	x		x
Non-surgical Periodontal Treatment	PE244	F	F	F	F	P	P	F	P	P	F
CLO1		x			x		x				x
CLO2		x	x			x	x				x
CLO3			x	x		x				x	
CLO4		x			x					x	
CLO5		x	x				x	x	x		x
CLO6		x		x			x			x	
Periodontal Surgery	PE249	F	F	F	F	P	P	F	P	P	F
CLO1		x			x		x				x
CLO2		x	x			x	x				x
CLO3				x				x		x	
CLO4		x			x					x	

CLO5		x	x	x			x	x	x		x
CLO6		x								x	
CLO7		x		x	x	x		x		x	x
Basic Implant Surgical and Restorative Techniques	PR351	F	F	F	F	P	F				F
CLO1		x	x				x				
CLO2		x	x	x							x
CLO3		x	x	x							x
CLO4		x		x	x	x	x				x
CLO5		x	x		x	x					x
Interdisciplinary Interfaces	PE246	F	F	F	P		F	F	F	P	F
CLO1		x		x	x		x		x		x
CLO2		x	x				x				x
CLO3		x		x				x		x	
CLO4		x			x					x	
CLO5		x	x	x			x	x	x		x
CLO6		x								x	
CLO7		x		x	x			x		x	x
CLO8		x		x	x		x		x		x
CLO9		x	x				x				x
CLO10			x	x				x		x	
CLO11		x			x		x			x	

Advanced Implant Surgical and Restorative Techniques	PR352	F	F	F	F	P	F				F
CLO1		x	x	x	x	x	x				x
CLO2		x	x	x	x	x	x				x
CLO3		x	x	x	x	x	x				x
CLO4		x	x	x	x		x				x
Mucogingival Surgery and Regenerative Techniques	PE250	F	F	F	F	P	P	F	P	P	F
CLO1		x			x		x				x
CLO2		x	x			x	x				x
CLO3				x				x		x	
CLO4		x			x					x	
CLO5		x	x	x			x	x	x		x
CLO6		x								x	
CLO7		x			x	x		x		x	x
Oral Pathology and Oral Medicine	PE256	F	P	F	P	F		P	P	F	P
CLO1		x			x		x				x
CLO2		x	x			x	x				x
CLO3		x		x		x		x		x	
Consolidation of Periodontics Training	PE259	F	P	P	P	P	F	F	P	P	P
CLO1		x		x	x		x		x		x

**Decide how much a course contributes to the overall program outcomes**

Fully (F)

Partly (P)

**17.3.6. Prosthodontic Program Learning Outcomes**

Courses	Course Code	HBMCMDM Program Learning Outcomes (PLOs)									
		PLO A1	PLO A2	PLO A3	PLO B1	PLO B2	PLO B3	PLO B4	PLO C1	PLO C2	PLO C3
Temporomandibular disorders	PR366	F	P	F	P	F		P	P	F	P
CLO1		x	x	x							
CLO2		x	x	x	x	x		x	x	x	x
CLO3		x	x	x				x	x	x	x
CLO4		x	x	x	x			x	x	x	x
CLO5			x			x					
CLO6		x	x	x	x	x		x	x	x	x
CLO7		x	x	x	x	x		x	x	x	x
CLO8		x		x	x				x	x	x
CLO9		x		x	x				x	x	x
CLO10		x		x	x	x			x		x
Caries management, diagnosis and treatment planning	PR362	F	F	F	F	F	F				F
CLO1		x	x		x		x				x



CLO2		x	x	x	x	x	x				x
CLO3		x	x		x		x				x
CLO4		x	x		x		x				x
CLO5		x	x	x	x	x	x				x
CLO6		x	x	x	x	x	x				x
CLO7		x	x	x	x	x	x				x
Principles of Fixed Prosthodontics	PR346	F	F	F	F	P	F				F
CLO1		x	x	x	x	x	x				x
CLO2		x	x	x	x	x	x				x
CLO3		x	x	x	x		x				x
CLO4		x	x	x	x		x				x
CLO5		x	x	x	x		x				
CLO6		x	x	x	x		x				x
CLO7		x	x	x	x	x	x				x
CLO8		x	x	x	x	x	x				x
Advanced prosthodontics: Clinical skills facility	PR331	F	F	F	F	P	F		F	F	F
CLO1		x	x			x	x		x	x	x

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		x	x			x			x	x	x
CLO7		x	x	x		x			x		x
CLO8		x	x	x	x	x			x		x
CLO9		x	x	x	x	x			x		x
CLO10		x	x	x	x				x		x
Scientific literature	PR321/322/323/ 324/325/326	F	F	F	F	P					F
CLO1		x	x	x	x	x					x
CLO2		x			x	x					x
CLO3		x			x	x					x
CLO4		x			x	x					x
CLO5		x	x	x	x	x					x
Removable prosthodontics: complete dentures	PR355	F	F	F	F	P	F				F
CLO1		x	x	x			x				x

CLO2		x	x	x	x		x				x
CLO3		x	x	x	x	x	x				x
CLO4			x	x	x	x	x				x
CLO5		x	x	x	x	x	x				x
CLO6		x	x	x	x		x				
CLO7		x	x	x	x		x				
Periodontics and Endodontics for Prosthodontic Specialists	PR365	P	P	P	P	P	F				F
CLO1		x	x	x	x	x	x				x
CLO2		x					x				x
CLO3		x	x	x	x	x	x				x
CLO4		x	x				x				x
CLO5		x	x	x	x	x	x				x
CLO6		x	x		x		x				x
CLO7		x	x		x		x				x
CLO8		x	x		x		x				x
CLO9		x	x	x			x				x

Specialty Clinical Training - Clinic	PR332/333/ 334/335/336	F	F	F	F	P	F	F	F	F	F
CLO1		x	x	x	x	x	x		x	x	x
CLO2		x	x	x	x	x	x		x	x	x
CLO3		x	x		x		x		x	x	x
CLO4		x	x	x	x	x	x		x	x	x
CLO5		x	x	x	x		x		x		
CLO6		x	x	x	x	x	x		x	x	x
CLO7		x	x	x	x	x		x	x		x
Research dissertation	PR312/313/ 314/315/316	F	P	P	F	P					F
CLO1			x	x	x	x					x
CLO2			x	x	x	x					x
CLO3			x	x	x	x					x
CLO4			x	x	x	x					x
CLO5			x	x	x	x					x
CLO6			x	x	x	x					x
CLO7			x	x	x	x					x
CLO8			x	x	x	x					x

CLO9			x	x	x	x					x
CLO10			x	x	x	x					x
Tooth wear & aesthetics	PR363	F	P	F	F	P	F			F	F
CLO1		x	x							x	x
CLO2		x	x		x					x	x
CLO3		x	x	x			x			x	x
CLO4		x	x	x	x	x	x			x	x
CLO5		x	x	x	x	x	x			x	x
CLO6		x	x	x	x	x	x			x	x
CLO7		x	x		x	x	x			x	x
CLO8		x	x	x	x	x	x			x	x
Removable prosthodontics: Partial dentures	PR354	F	F	F	F	P					F
CLO1		x	x	x	x	x					x
CLO2		x	x	x	x	x					x
CLO3		x	x	x	x	x					x
CLO4		x	x		x	x					x
CLO5		x	x	x	x						x

Basic Implant Surgical and Restorative Techniques	PR351	F	F	F	F	P	F				F
CLO1		x	x				x				
CLO2		x	x	x							x
CLO3		x	x	x							x
CLO4		x		x	x	x	x				x
CLO5		x	x		x	x					x
Dental biomaterials	PR347	F	F	F	F	P					F
CLO1		x	x	x	x						x
CLO2		x	x	x	x						x
CLO3		x	x	x	x						x
CLO4		x	x	x	x	x					x
CLO5		x	x	x		x					x
CLO6		x			x	x					x
Medical problems relevant to prosthodontics	PR361	F	F	F	F	P	F				F
CLO1		x	x	x	x		x				x
CLO2		x	x	x	x		x				x
CLO3		x	x	x	x	x	x				x

CLO4		x	x	x	x	x	x				x
Advanced Implant Surgical and Restorative Techniques	PR352	F	F	F	F	P	F				F
CLO1		x	x	x	x	x	x				x
CLO2		x	x	x	x	x	x				x
CLO3		x	x	x	x	x	x				x
CLO4		x	x	x	x		x				x
Consolidation of Prosthodontic Training	PR364	F	P	F	F						F
CLO1		x		x	x						x
CLO2		x	x	x	x						x
CLO3		x			x						x
CLO4		x	x	x	x						x
CLO5		x									x
CLO6		x		x	x						x

**Decide how much a course contributes to the overall program outcomes**

Fully (F)

Partly (P)

## 17.4. Program/Course Level Assessment Rubrics

### 17.4.1. Endodontics – Assessment Rubrics

S No	PLO	CLO	Assessment Tool	Sampling Method (Direct or Indirect)	Desired Result Benchmark	Semester Cohort to be Assessed	Summative Response
1	<b>A1.</b> 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.	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	80% of students achieve greater than C in all graded course work.	2020 -2021	If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy
		CC503	Written exam		80% of students achieve a Pass grade in Research Dissertation.		
		CC502	Written exam Assignment		100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.		
		CC511	Written exam		100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.		
		CC508	Written exam Presentation Assignment		100% of students obtain		
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		EN841	Written exam				



		EN842	Written exam Practical exam Logbook		<p>a "pass" on case based presentations.</p> <p>80% of students pass oral clinical exam on first attempt.</p>		
		EN812/813/ 814/ 815/816	Thesis Dissertation				
		EN821/822/823/ 824/825/826	Critique of literature Oral presentation				
		EN837/838/839	Logbook WBA				
		EN843	Written exam				
		EN844	Written exam				
		EN846	Written exam				
		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				
		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				

		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				
2	A2 A comprehensive understanding of techniques applicable to the clinical practice and their own research.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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	2020 -2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC502	Written exam Assignment				
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		EN841	Written exam				
		EN842	Written exam Practical exam Logbook				
		EN812/813/ 814/ 815/816	Thesis Dissertation				

		EN821/822/823/ 824/825/826	Critique of literature Oral presentation		attempt.		
		EN837/838/839	Logbook WBA				
		EN843	Written exam				
		EN844	Written exam				
		EN846	Written exam				
		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				
		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				
		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				

3	<b>A3.</b> 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	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	80% of students achieve greater than C in all graded course work.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC502	Written exam Assignment		80% of students achieve a Pass grade in Research Dissertation.		
		CC511	Written exam		100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.		
		CC508	Written exam Presentation Assignment		100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.		
		CC509	Written exam Quizzes Presentation Seminar Technique		100% of students obtain a "pass" on case based presentations.		
		CC504	Written exam Assignment		80% of students pass oral clinical exam on first attempt.		
		EN841	Written exam				
		EN842	Written exam Practical exam Logbook				
		EN812/813/ 814/ 815/816	Thesis Dissertation				
		EN821/822/823/ 824/825/826	Critique of literature Oral presentation				

		EN837/838/839	Logbook WBA				
		EN843	Written exam				
		EN844	Written exam				
		EN846	Written exam				
		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				
		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				
		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				

4	B1. Evaluate critically current research and advanced scholarship in the discipline.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	80% of students achieve greater than C in all graded course work.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC508	Written exam Presentation Assignment		80% of students achieve a Pass grade in Research Dissertation.		
		CC509	Written exam Quizzes Presentation Seminar Technique		100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.		
		CC504	Written exam Assignment				
		EN841	Written exam		100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.		
		EN842	Written exam Practical exam Logbook				
		EN812/813/ 814/ 815/816	Thesis Dissertation		100% of students obtain a "pass" on case based presentations.		
		EN821/822/823/ 824/825/826	Critique of literature Oral presentation		80% of students pass oral clinical exam on first attempt.		
		EN837/838/839	Logbook WBA				
		EN843	Written exam				

		EN844	Written exam				
		EN846	Written exam				
		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				
		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				
		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				
5	<b>B2.</b> Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report	80% of students achieve greater than C in all graded course work.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC508	Written exam Presentation Assignment	80% of students achieve a Pass grade in Research Dissertation.				
	CC509	Written exam Quizzes Presentation Seminar Technique	100% of students demonstrate the set minimal competencies in				

		CC504	Written exam Assignment	<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		EN841	Written exam				
		EN842	Written exam Practical exam Logbook				
		EN812/813/ 814/ 815/816	Thesis Dissertation				
		EN821/822/823/ 824/825/826	Critique of literature Oral presentation				
		EN837/838/839	Logbook WBA				
		EN843	Written exam				
		EN844	Written exam				
		EN846	Written exam				
		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				



		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				
		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				
6	<b>B3.</b> 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	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC503	Written exam				
		CC511	Written exam				
		EN841	Written exam				
		EN842	Written exam Practical exam Logbook				
		EN821/822/823/824/825/826	Critique of literature Oral presentation				
		EN837/838/839	Logbook WBA				
		EN843	Written exam				

		EN844	Written exam		<p>100% of students obtain a "pass" on case based presentations.</p> <p>80% of students pass oral clinical exam on first attempt.</p>		
		EN846	Written exam				
		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				
		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				
		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				
7	<b>B4.</b> Provide treatment for patients with moderate to difficult requirements.	CC509	Written exam Quizzes Presentation Seminar Technique	<p><b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation</p> <p><b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner</p>	<p>80% of students achieve greater than C in all graded course work.</p> <p>80% of students achieve a Pass grade in Research Dissertation.</p> <p>100% of students demonstrate the set</p>	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC504	Written exam Assignment				
		EN841	Written exam				

		EN842	Written exam Practical exam Logbook	Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		EN821/822/823/ 824/825/826	Critique of literature Oral presentation				
		EN837/838/839	Logbook WBA				
		EN843	Written exam				
		EN844	Written exam				
		EN846	Written exam				
		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				
		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				
		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				

8	C1. Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		EN841	Written exam				
		EN842	Written exam Practical exam Logbook				
		EN812/813/ 814/ 815/816	Thesis Dissertation				
		EN821/822/823/ 824/825/826	Critique of literature Oral presentation				
		EN837/838/839	Logbook WBA				
		EN843	Written exam				
		EN844	Written exam				
EN846	Written exam						

		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				
		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				
		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				
9	C2. Become life- long learners and educators.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report <b>Indirect</b> Advisory Group	80% of students achieve greater than C in all graded course work.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC509	Written exam Quizzes Presentation Seminar Technique	80% of students achieve a Pass grade in Research Dissertation.				
	CC504	Written exam Assignment	100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in				
	EN841	Written exam					

		EN842	Written exam Practical exam Logbook	Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		EN812/813/ 814/ 815/816	Thesis Dissertation				
		EN821/822/823/ 824/825/826	Critique of literature Oral presentation				
		EN837/838/839	Logbook WBA				
		EN843	Written exam				
		EN844	Written exam				
		EN846	Written exam				
		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				
		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				

		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				
10	C3. Appreciate that evidence-based practice underpins patient care.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		EN841	Written exam				
		EN842	Written exam Practical exam Logbook				
		EN812/813/ 814/ 815/816	Thesis Dissertation				
		EN821/822/823/ 824/825/826	Critique of literature Oral presentation				
		EN837/838/839	Logbook WBA				

		EN843	Written exam		attempt.		
		EN844	Written exam				
		EN846	Written exam				
		EN852	Team based learning, Presentation and journal club write up, Written exam				
		EN854	Written exam				
		EN849	Written exam Practical Case discussion (oral)				
		EN850	Written exam				
		EN853	Hand in of 6 clinical cases fully referenced for marking Unseen cases (viva)				



## 17.4.2. Orthodontics – Assessment Rubrics

S No	PLO	CLO	Assessment Tool	Sampling Method (Direct or Indirect)	Desired Result Benchmark	Semester Cohort to be Assessed	Summative Response	
1	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.	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation	80% of students achieve greater than C in all graded course work.	2020 -2021	If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy	
		CC503	Written exam		<b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report			80% of students achieve a Pass grade in Research Dissertation.
		CC502	Written exam Assignment					100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.
		CC511	Written exam	<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.			
		CC508	Written exam Presentation Assignment		100% of students obtain a "pass" on case based presentations.			
		CC509	Written exam Quizzes Presentation Seminar Technique		80% of students pass oral clinical exam on first			
		CC504	Written exam Assignment					
		OR621/622/623/ 624/625/626	Presentation Critique of literature Presentation					
OR637/638/639	Logbook WBA							

		OR655	Written exam		attempt.		
		OR656	Written exam				
		OR657	Written exam				
		OR658	Written exam				
		OR659	Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination				
		PR366	Written exam				
		OR611/612/613/ 614/615/616	Thesis Dissertation				
		OR641	Practical test				
		OR642	Written exam				
		OR643	Quizzes Presentation and assignments Written exam				

		OR644	Quizzes Presentation and assignments Written exam				
		OR647	Written exam				
		OR648	Written exam				
		OR650	Written exam				
		OR652	Written exam				
		OR653	Written exam				
2	<b>A2. A</b> comprehensive understanding of techniques applicable to the clinical practice and their own research.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion	80% of students achieve greater than C in all graded course work.	2020 -2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC502	Written exam Assignment	80% of students achieve a Pass grade in Research Dissertation.				
	CC508	Written exam Presentation Assignment	100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.				
	CC509	Written exam Quizzes Presentation Seminar Technique					
	CC504	Written exam Assignment					

		OR621/622/623/ 624/625/626	Presentation Critique of literature Presentation	Applications Quality of recruits to program	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.		
		OR637/638/639	Logbook WBA				
		OR655	Written exam				
		OR656	Written exam				
		OR657	Written exam				
		OR658	Written exam				
		OR659	Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination				
		PR366	Written exam				
		OR611/612/613/ 614/615/616	Thesis Dissertation				
		OR641	Practical test				

		OR642	Written exam				
		OR643	Quizzes Presentation and assignments Written exam				
		OR644	Quizzes Presentation and assignments Written exam				
		OR647	Written exam				
		OR648	Written exam				
		OR650	Written exam				
		OR652	Written exam				
		OR653	Written exam				
3	<b>A3.</b> Originality in the application of clinical and scientific knowledge, together with a practical understanding	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner	80% of students achieve greater than C in all graded course work.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC502	Written exam Assignment	80% of students achieve a Pass grade in Research Dissertation.				
	CC511	Written exam	100% of students demonstrate the set				
	CC508	Written exam Presentation Assignment					

of how established techniques of research and enquiry are used to create and interpret knowledge in the discipline	CC509	Written exam Quizzes Presentation Seminar Technique	Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
	CC504	Written exam Assignment				
	OR621/622/623/624/625/626	Presentation Critique of literature Presentation				
	OR637/638/639	Logbook WBA				
	OR655	Written exam				
	OR656	Written exam				
	OR657	Written exam				
	OR658	Written exam				
	OR659	Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination				
	PR366	Written exam				

		OR611/612/613/ 614/615/616	Thesis Dissertation				
		OR641	Practical test				
		OR642	Written exam				
		OR643	Quizzes Presentation and assignments Written exam				
		OR644	Quizzes Presentation and assignments Written exam				
		OR647	Written exam				
		OR648	Written exam				
		OR650	Written exam				
4	<b>B1. Evaluate critically current research and advanced scholarship in the discipline.</b>	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report	80% of students achieve greater than C in all graded course work.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC508	Written exam Presentation Assignment	80% of students achieve a Pass grade in Research Dissertation.				
	CC509	Written exam Quizzes Presentation Seminar Technique	100% of students demonstrate the set				

		CC504	Written exam Assignment	<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		OR621/622/623/ 624/625/626	Presentation Critique of literature Presentation				
		OR637/638/639	Logbook WBA				
		OR655	Written exam				
		OR656	Written exam				
		OR657	Written exam				
		OR658	Written exam				
		OR659	Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination				
		PR366	Written exam				
		OR611/612/613/ 614/615/616	Thesis Dissertation				
		OR642	Written exam				



		OR643	Quizzes Presentation and assignments Written exam				
		OR644	Quizzes Presentation and assignments Written exam				
		OR647	Written exam				
		OR648	Written exam				
		OR652	Written exam				
		OR653	Written exam				
5	<b>B2.</b> Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers	80% of students achieve greater than C in all graded course work.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC508	Written exam Presentation Assignment	80% of students achieve a Pass grade in Research Dissertation.				
	CC509	Written exam Quizzes Presentation Seminar Technique	100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based				
	CC504	Written exam Assignment					

		OR621/622/623/ 624/625/626	Presentation Critique of literature Presentation	Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		OR637/638/639	Logbook WBA				
		OR655	Written exam				
		OR656	Written exam				
		OR657	Written exam				
		OR658	Written exam				
		OR659	Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination				
		PR366	Written exam				
		OR611/612/613/ 614/615/616	Thesis Dissertation				
		OR642	Written exam				
		OR643	Quizzes Presentation and assignments Written exam				

		OR644	Quizzes Presentation and assignments Written exam				
		OR647	Written exam				
6	<b>B3.</b> 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	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC503	Written exam				
		CC511	Written exam				
		OR621/622/623/624/625/626	Presentation Critique of literature Presentation				
		OR637/638/639	Logbook WBA				
		OR655	Written exam				
		OR656	Written exam				
		OR657	Written exam				
		OR658	Written exam				
		OR659	Structured clinical reasoning Unseen clinical cases and oral discussion				

			Clinical case discussion Oral examination		clinical exam on first attempt.		
		OR641	Practical test				
		OR647	Written exam				
		OR648	Written exam				
		OR650	Written exam				
		OR652	Written exam				
		OR653	Written exam				
7	<b>B4. Provide treatment for patients with moderate to difficult requirements.</b>	CC509	Written exam Quizzes Presentation Seminar Technique	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers	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	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC504	Written exam Assignment				
		OR621/622/623/ 624/625/626	Presentation Critique of literature Presentation				
		OR637/638/639	Logbook WBA				

		OR655	Written exam	Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		OR656	Written exam				
		OR657	Written exam				
		OR658	Written exam				
		OR659	Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination				
		PR366	Written exam				
		OR641	Practical test				
		OR642	Written exam				
		OR643	Quizzes Presentation and assignments Written exam				
		OR644	Quizzes Presentation and assignments Written exam				

		OR647	Written exam				
		OR648	Written exam				
		OR650	Written exam				
		OR652	Written exam				
		OR653	Written exam				
8	<b>C1.</b> Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		OR621/622/623/ 624/625/626	Presentation Critique of literature Presentation				
		OR637/638/639	Logbook WBA				
		OR655	Written exam				
		OR656	Written exam				

		OR657	Written exam		a "pass" on case based presentations.		
		OR658	Written exam				
		OR659	Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination		80% of students pass oral clinical exam on first attempt.		
		PR366	Written exam				
		OR611/612/613/ 614/615/616	Thesis Dissertation				
		OR641	Practical test				
		OR642	Written exam				
		OR643	Quizzes Presentation and assignments Written exam				
		OR644	Quizzes Presentation and assignments Written exam				
		OR647	Written exam				
		OR648	Written exam				

		OR650	Written exam				
		OR652	Written exam				
		OR653	Written exam				
9	C2. Become life-long learners and educators.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report	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	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		OR621/622/623/ 624/625/626	Presentation Critique of literature Presentation	<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program			
		OR637/638/639	Logbook WBA				
		OR655	Written exam				
		OR656	Written exam				
		OR657	Written exam				



		OR658	Written exam		presentations.  80% of students pass oral clinical exam on first attempt.		
		OR659	Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination				
		PR366	Written exam				
		OR611/612/613/ 614/615/616	Thesis Dissertation				
		OR641	Practical test				
		OR642	Written exam				
		OR643	Quizzes Presentation and assignments Written exam				
		OR648	Written exam				
		OR653	Written exam				
10	<b>C3.</b> Appreciate that evidence-based	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams,	80% of students achieve greater than C in all	2020-2021	If less than desired MBRU

practice underpins patient care.	CC508	Written exam Presentation Assignment	Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.	will review PLOs & CLOs and Assessment Strategy
	CC509	Written exam Quizzes Presentation Seminar Technique			
	CC504	Written exam Assignment			
	OR621/622/623/ 624/625/626	Presentation Critique of literature Presentation			
	OR637/638/639	Logbook WBA			
	OR655	Written exam			
	OR656	Written exam			
	OR657	Written exam			
	OR658	Written exam			
	OR659	Structured clinical reasoning Unseen clinical cases and oral discussion Clinical case discussion Oral examination			

		PR366	Written exam				
		OR611/612/613/ 614/615/616	Thesis Dissertation				
		OR641	Practical test				
		OR642	Written exam				
		OR643	Quizzes Presentation and assignments Written exam				
		OR644	Quizzes Presentation and assignments Written exam				
		OR647	Written exam				
		OR648	Written exam				
		OR652	Written exam				
		OR653	Written exam				

### 17.4.3. Pediatric Dentistry – Assessment Rubrics

S No	PLO	CLO	Assessment Tool	Sampling Method (Direct or Indirect)	Desired Result Benchmark	Semester Cohort to be Assessed	Summative Response	
1	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.	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation	80% of students achieve greater than C in all graded course work.	2020 -2021	If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy	
		CC503	Written exam		<b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report			80% of students achieve a Pass grade in Research Dissertation.
		CC502	Written exam Assignment					100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.
		CC511	Written exam		<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program			100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.
		CC508	Written exam Presentation Assignment	100% of students obtain a "pass" on case based presentations.				
		CC509	Written exam Quizzes Presentation Seminar Technique	80% of students pass oral				
		CC504	Written exam Assignment					
		PD441	Written exam Quizzes					

		PD442	Written exam Quizzes		clinical exam on first attempt.		
		PD421/422/423/ 424/425/426	Presentation				
		PD437/438/439	Oral Exam Logbook WBA Case Presentation 360 multisource feedback				
		PD411/412/413/ 414/415/416	Thesis Dissertation				
		OR643	Written exam Presentation Quizzes				
		PD443	Written exam Quizzes Presentation				
		PD446	Written exam Quizzes				
		PD445	Written exam Quizzes Presentation				
		PD450	Written exam				

		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
		PD454/455	Written exam Quizzes Presentation Governance project				
2	<b>A2. A</b> comprehensive understanding of techniques applicable to the clinical practice and their own research.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	80% of students achieve greater than C in all graded course work.	2020 -2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC502	Written exam Assignment		80% of students achieve a Pass grade in Research Dissertation.		
		CC508	Written exam Presentation Assignment		100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.		
		CC509	Written exam Quizzes Presentation Seminar Technique		100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.		
		CC504	Written exam Assignment		100% of students obtain a		
		PD441	Written exam Quizzes				

		PD442	Written exam Quizzes		"pass" on case based presentations.		
		PD421/422/423/ 424/425/426	Presentation		80% of students pass oral clinical exam on first attempt.		
		PD437/438/439	Oral Exam Logbook WBA Presentation 360 multisource feedback				
		PD411/412/413/ 414/415/416	Thesis Dissertation				
		OR643	Written exam Presentation Quizzes				
		PD443	Written exam Quizzes Presentation				
		PD444	Written exam Quizzes Presentation				
		PD446	Written exam Quizzes				

		PD445	Written exam Quizzes Presentation				
		PD450	Written exam				
		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
		PD454/455	Written exam Quizzes Presentation Governance project				
3	<b>A3.</b> Originality in the application of clinical and scientific knowledge, together with a practical understanding of how established	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report	80% of students achieve greater than C in all graded course work.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC502	Written exam Assignment	80% of students achieve a Pass grade in Research Dissertation.				
	CC511	Written exam	100% of students demonstrate the set minimal competencies in clinical skills				
	CC508	Written exam Presentation Assignment					



techniques of research and enquiry are used to create and interpret knowledge in the discipline	CC509	Written exam Quizzes Presentation Seminar Technique	<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
	CC504	Written exam Assignment				
	PD441	Written exam Quizzes				
	PD442	Written exam Quizzes				
	PD421/422/423/ 424/425/426	Presentation				
	PD437/438/439	Oral Exam Logbook WBA Presentation 360 multisource feedback				
	PD411/412/413/ 414/415/416	Thesis Dissertation				
	OR643	Written exam Presentation Quizzes				
	PD443	Written exam Quizzes Presentation				

		PD444	Written exam Quizzes Presentation				
		PD446	Written exam Quizzes				
		PD445	Written exam Quizzes Presentation				
		PD450	Written exam				
		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
4	<b>B1. Evaluate critically current research and advanced scholarship in the discipline.</b>	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers	80% of students achieve greater than C in all graded course work.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC508	Written exam Presentation Assignment	80% of students achieve a Pass grade in Research Dissertation.				
	CC509	Written exam Quizzes Presentation Seminar Technique	100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-				
	CC504	Written exam Assignment					

		PD441	Written exam Quizzes	Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		PD442	Written exam Quizzes				
		PD421/422/423/ 424/425/426	Presentation				
		PD437/438/439	Oral Exam Logbook WBA Presentation 360 multisource feedback				
		PD411/412/413/ 414/415/416	Thesis Dissertation				
		OR643	Written exam Presentation Quizzes				
		PD443	Written exam Quizzes Presentation				
		PD444	Written exam Quizzes Presentation				
		PD446	Written exam Quizzes				

		PD445	Written exam Quizzes Presentation				
		PD450	Written exam				
		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
		PD454/455	Written exam Quizzes Presentation Governance project				
5	<b>B2.</b> Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers	80% of students achieve greater than C in all graded course work.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC508	Written exam Presentation Assignment	80% of students achieve a Pass grade in Research Dissertation.				
	CC509	Written exam Quizzes Presentation Seminar Technique	100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-				
	CC504	Written exam Assignment					

		PD441	Written exam Quizzes	Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		PD442	Written exam Quizzes				
		PD421/422/423/ 424/425/426	Presentation				
		PD437/438/439	Oral Exam Logbook WBA Presentation 360 multisource feedback				
		PD411/412/413/ 414/415/416	Thesis Dissertation				
		OR643	Written exam Presentation Quizzes				
		PD443	Written exam Quizzes Presentation				
		PD444	Written exam Quizzes Presentation				
		PD446	Written exam Quizzes				

		PD445	Written exam Quizzes Presentation				
		PD450	Written exam				
		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
		PD454/455	Written exam Quizzes Presentation Governance project				
6	<b>B3.</b> 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	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation	80% of students achieve greater than C in all graded course work.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC503	Written exam				
		CC511	Written exam	<b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report	80% of students achieve a Pass grade in Research Dissertation.		
		PD441	Written exam Quizzes				
		PD442	Written exam Quizzes	<b>Indirect</b> Advisory Group Employers	100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-		

appropriate	PD421/422/423/ 424/425/426	Presentation	Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
	PD437/438/439	Oral Exam Logbook WBA Presentation 360 multisource feedback				
	PD411/412/413/ 414/415/416	Thesis Dissertation				
	OR643	Written exam Presentation Quizzes				
	PD443	Written exam Quizzes Presentation				
	PD444	Written exam Quizzes Presentation				
	PD446	Written exam Quizzes				
	PD445	Written exam Quizzes Presentation				
	PD450	Written exam				

		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
		PD454/455	Written exam Quizzes Presentation Governance project				
7	<b>B4.</b> Provide treatment for patients with moderate to difficult requirements.	CC509	Written exam Quizzes Presentation Seminar Technique	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	80% of students achieve greater than C in all graded course work.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC504	Written exam Assignment		80% of students achieve a Pass grade in Research Dissertation.		
		PD441	Written exam Quizzes		100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.		
		PD442	Written exam Quizzes		100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.		
		PD421/422/423/424/425/426	Presentation		100% of students obtain a		
		PD437/438/439	Oral Exam Logbook WBA Presentation		100% of students obtain a		



			360 multisource feedback		"pass" on case based presentations.		
		OR643	Written exam Presentation Quizzes		80% of students pass oral clinical exam on first attempt.		
		PD443	Written exam Quizzes Presentation				
		PD444	Written exam Quizzes Presentation				
		PD446	Written exam Quizzes				
		PD445	Written exam Quizzes Presentation				
		PD450	Written exam				
		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
		PD454/455	Written exam Quizzes Presentation Governance				

			project				
8	C1. Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PD441	Written exam Quizzes				
		PD442	Written exam Quizzes				
		PD421/422/423/ 424/425/426	Presentation				
		PD437/438/439	Oral Exam Logbook WBA Presentation 360 multisource feedback				
		PD411/412/413/ 414/415/416	Thesis Dissertation				

		OR643	Written exam Presentation Quizzes				
		PD443	Written exam Quizzes Presentation				
		PD444	Written exam Quizzes Presentation				
		PD446	Written exam Quizzes				
		PD445	Written exam Quizzes Presentation				
		PD450	Written exam				
		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
		PD454/455	Written exam Quizzes Presentation Governance project				
9	C2. Become life-long learners and educators.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio,	80% of students achieve greater than C in all graded	2020-2021	If less than desired MBRU will review PLOs

		CC509	Written exam Quizzes Presentation Seminar Technique	Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	course work.  80% of students achieve a Pass grade in Research Dissertation.	& CLOs and Assessment Strategy
		CC504	Written exam Assignment		100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.	
		PD441	Written exam Quizzes		100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.	
		PD442	Written exam Quizzes		100% of students obtain a "pass" on case based presentations.	
		PD421/422/423/424/425/426	Presentation		80% of students pass oral clinical exam on first attempt.	
		PD437/438/439	Oral Exam Logbook WBA Presentation 360 multisource feedback			
		PD411/412/413/414/415/416	Thesis Dissertation			
		OR643	Written exam Presentation Quizzes			
		PD443	Written exam Quizzes Presentation			

		PD444	Written exam Quizzes Presentation				
		PD446	Written exam Quizzes				
		PD445	Written exam Quizzes Presentation				
		PD450	Written exam				
		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
		PD454/455	Written exam Quizzes Presentation Governance project				
10	<b>C3.</b> Appreciate that evidence-based practice underpins patient care.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner	80% of students achieve greater than C in all graded course work.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC508	Written exam Presentation Assignment	80% of students achieve a Pass grade in Research Dissertation.				
	CC509	Written exam Quizzes Presentation Seminar	100% of students demonstrate the set minimal				

			Technique	Report	competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.		
		CC504	Written exam Assignment	<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.		
		PD441	Written exam Quizzes		100% of students obtain a "pass" on case based presentations.		
		PD442	Written exam Quizzes		80% of students pass oral clinical exam on first attempt.		
		PD421/422/423/ 424/425/426	Presentation				
		PD437/438/439	Oral Exam Logbook WBA Presentation 360 multisource feedback				
		PD411/412/413/ 414/415/416	Thesis Dissertation				
		OR643	Written exam Presentation Quizzes				
		PD443	Written exam Quizzes Presentation				
		PD444	Written exam Quizzes Presentation				

		PD446	Written exam Quizzes				
		PD445	Written exam Quizzes Presentation				
		PD450	Written exam				
		PD451	Written exam Quizzes Presentation				
		PD448	Written exam Quizzes Presentation				
		PD454/455	Written exam Quizzes Presentation Governance project				

#### 17.4.4. Periodontology – Assessment Rubrics

S No	PLO	CLO	Assessment Tool	Sampling Method (Direct or Indirect)	Desired Result Benchmark	Semester Cohort to be Assessed	Summative Response
1	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.	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	80% of students achieve greater than C in all graded course work.	2020 -2021	If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy
		CC503	Written exam		80% of students achieve a Pass grade in Research Dissertation.		
		CC502	Written exam Assignment		100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.		
		CC511	Written exam		100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.		
		CC508	Written exam Presentation Assignment		100% of students obtain a "pass" on case		
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PE211/212/213/ 214/215/216	Thesis Dissertation				
		PE246	Written exam				
		PE256	Written exam				



		PE221/222/223 224/225/226	Journal club Case presentation Essay assignment/presentation		based presentations.  80% of students pass oral clinical exam on first attempt.		
		PE237/238/239	Competency forms Oral examination Community service Logbook				
		PE241	Written exam				
		PE243	Written exam				
		PE244	Written exam				
		PE249	Written exam				
		PR351	Written exam				
		PR352	Written exam				
		PE250	Written exam				
		PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				

		CC503	Written exam				
2	A2. A comprehensive understanding of techniques applicable to the clinical practice and their own research.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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	2020 -2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PE211/212/213/214/215/216	Thesis Dissertation				
		PE246	Written exam				
		PE256	Written exam				
		PE221/222/223/224/225/226	Journal club Case presentation Essay assignment/presentation				
		PE237/238/239	Competency forms Oral examination Community service Logbook				

		PE241	Written exam		first attempt.		
		PE243	Written exam				
		PE244	Written exam				
		PE249	Written exam				
		PR351	Written exam				
		PR352	Written exam				
		PE250	Written exam				
		PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				
		CC510	Written exam				
		CC502	Written exam Assignment				

3	<b>A3.</b> 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	CC511	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PE211/212/213/ 214/215/216	Thesis Dissertation				
		PE246	Written exam				
		PE256	Written exam				
		PE221/222/223 224/225/226	Journal club Case presentation Essay assignment/presentation				
		PE237/238/239	Competency forms Oral examination Community service Logbook				

		PE241	Written exam		first attempt.		
		PE243	Written exam				
		PE244	Written exam				
		PE249	Written exam				
		PR351	Written exam				
		PR352	Written exam				
		PE250	Written exam				
		PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				
		CC502	Written exam Assignment				
		CC508	Written exam Presentation Assignment				

		CC509	Written exam Quizzes Presentation Seminar Technique				
4	<b>B1.</b> Evaluate critically current research and advanced scholarship in the discipline.	CC504	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		PE211/212/213/ 214/215/216	Thesis Dissertation				
		PE246	Written exam				
		PE256	Written exam				
		PE221/222/223 224/225/226	Journal club Case presentation Essay assignment/presentation				
		PE237/238/239	Competency forms Oral examination Community service Logbook				
		PE241	Written exam				
		PE243	Written exam				

		PE244	Written exam		based presentations.  80% of students pass oral clinical exam on first attempt.		
		PE249	Written exam				
		PR351	Written exam				
		PR352	Written exam				
		PE250	Written exam				
		PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				
		CC502	Written exam Assignment				
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				

		CC504	Written exam Assignment				
5	<b>B2.</b> Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.	PE211/212/213/ 214/215/216	Thesis Dissertation	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		PE256	Written exam				
		PE221/222/223 224/225/226	Journal club Case presentation Essay assignment/presentation				
		PE237/238/239	Competency forms Oral examination Community service Logbook				
		PE241	Written exam				
		PE243	Written exam				
		PE244	Written exam				
		PE249	Written exam				



		PR351	Written exam		80% of students pass oral clinical exam on first attempt.		
		PR352	Written exam				
		PE250	Written exam				
		PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				
		CC510	Written exam				
		CC503	Written exam				
		CC511	Written exam				
		PE246	Written exam				
		PE221/222/223 224/225/226	Journal club Case presentation Essay assignment/presentation				

6	<b>B3.</b> 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	PE231/232/233/234/235/236	Competency forms Oral examination Community service Logbook	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	80% of students achieve greater than C in all graded course work.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		PE241	Written exam		80% of students achieve a Pass grade in Research Dissertation.		
		PE243	Written exam		100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.		
		PE244	Written exam		100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.		
		PE249	Written exam		100% of students obtain a "pass" on case based presentations.		
		PR351	Written exam		80% of students pass oral clinical exam on first attempt.		
		PR352	Written exam				
		PE250	Written exam				
		PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				

		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PE246	Written exam				
		PE256	Written exam				
		PE221/222/223 224/225/226	Journal club Case presentation Essay assignment/presentation				
		PE237/238/239	Competency forms Oral examination Community service Logbook				
7	<b>B4.</b> Provide treatment for patients with moderate to difficult requirements.			<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report	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	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		PE241	Written exam				
		PE243	Written exam				
		PE244	Written exam				

		PE249	Written exam	<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		PR351	Written exam				
		PR352	Written exam				
		PE250	Written exam				
		PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				
		CC503	Written exam				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PE211/212/213/214/215/216	Thesis Dissertation				
		PE246	Written exam				

		PE256	Written exam				
8	C1. Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.	PE221/222/223 224/225/226	Journal club Case presentation Essay assignment/presentation	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		PE237/238/239	Competency forms Oral examination Community service Logbook				
		PE241	Written exam				
		PE243	Written exam				
		PE244	Written exam				
		PE249	Written exam				
		PR351	Written exam				
		PR352	Written exam				

		PE250	Written exam		oral clinical exam on first attempt.		
		PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				
		CC503	Written exam				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PE211/212/213/ 214/215/216	Thesis Dissertation				
		PE246	Written exam				
		PE256	Written exam				
		PE221/222/223 224/225/226	Journal club Case presentation Essay assignment/presentation				
9	<b>C2.</b> Become life-long learners and educators.	PE237/238/239	Competency forms Oral examination Community service	<b>Direct Assessment:</b> Written exams, Portfolio,	80% of students achieve greater than C in all graded course	2020-2021	If less than desired MBRU will review

			Logbook	Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	work.	PLOs & CLOs and Assessment Strategy
	PE241	Written exam			80% of students achieve a Pass grade in Research Dissertation.	
	PE243	Written exam			100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.	
	PE244	Written exam			100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.	
	PE249	Written exam			100% of students obtain a "pass" on case based presentations.	
	PR351	Written exam			80% of students pass oral clinical exam on first attempt.	
	PR352	Written exam				
	PE250	Written exam				
	PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				
	CC502	Written exam Assignment				
	CC508	Written exam Presentation				

			Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PE211/212/213/ 214/215/216	Thesis Dissertation				
		PE246	Written exam				
		PE256	Written exam				
		PE221/222/223 224/225/226	Journal club Case presentation Essay assignment/presentation				
10	<b>C3.</b> Appreciate that evidence-based practice underpins patient care.	PE237/238/239	Competency forms Oral examination Community service Logbook	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group	80% of students achieve greater than C in all graded course work.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	PE241	Written exam	80% of students achieve a Pass grade in Research Dissertation.				
	PE243	Written exam	100% of students demonstrate the set minimal competencies in clinical skills by				
	PE244	Written exam					



		PE249	Written exam	Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		PR351	Written exam				
		PR352	Written exam				
		PE250	Written exam				
		PE259	General clinical Mock examination Specialist clinical Mock examination General cases including Mock evaluations Specialist cases including Mock examination				

## 17.4.5. Prosthodontics – Assessment Rubrics

S No	PLO	CLO	Assessment Tool	Sampling Method (Direct or Indirect)	Desired Result Benchmark	Semester Cohort to be Assessed	Summative Response
1	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.	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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	2020 -2021	If less than desired, MBRU will review PLOs & CLOs and Assessment Strategy
		CC503	Written exam				
		CC502	Written exam Assignment				
		CC511	Written exam				
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PR366	Written exam				
		PR362	Written exam				
		PR346	Written exam				
PR355	Written exam Presentations/seminars						

		PR365	Written exam		first attempt.		
		PR351	Written exam				
		PR361	Written exam				
		PR352	Written exam				
		PR331	Clinical assessment				
		PR321/322/333/ 334/335/336	Oral examination				
		PR312/313/ 314/315/316	Thesis/dissertation				
		PR354	Written exam				
		PR347	Written exam				
		PR332/338/339	Logbook and reflective learning portfolio WBA				
		PR363	Written exam				
		PR364	Oral exam Written exam				
2	A2. A comprehensive understanding	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral	80% of students achieve greater than C in all graded course	2020 -2021	If less than desired MBRU will review PLOs & CLOs
		CC502	Written exam Assignment				

of techniques applicable to the clinical practice and their own research.	CC508	Written exam Presentation Assignment	<p>exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report</p> <p><b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program</p>	<p>work.</p> <p>80% of students achieve a Pass grade in Research Dissertation.</p> <p>100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.</p> <p>100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.</p> <p>100% of students obtain a "pass" on case based presentations.</p> <p>80% of students pass oral clinical exam on first attempt.</p>	and Assessment Strategy
	CC509	Written exam Quizzes Presentation Seminar Technique			
	CC504	Written exam Assignment			
	PR366	Written exam			
	PR362	Written exam			
	PR346	Written exam			
	PR355	Written exam Presentations/seminars			
	PR365	Written exam			
	PR351	Written exam			
	PR361	Written exam			
	PR352	Written exam			
	PR331	Clinical assessment			
PR321/322/333/ 334/335/336	Oral examination				

		PR312/313/ 314/315/316	Thesis dissertation				
		PR354	Written exam				
		PR347	Written exam				
		PR332/338/339	Logbook and reflective learning portfolio WBA				
		PR363	Written exam				
		PR364	Oral exam Written exam				
3	<b>A3.</b> 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	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to	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.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC502	Written exam Assignment				
		CC511	Written exam				
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				

the discipline	PR366	Written exam	program	<p>100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.</p> <p>100% of students obtain a "pass" on case based presentations.</p> <p>80% of students pass oral clinical exam on first attempt.</p>		
	PR362	Written exam				
	PR346	Written exam				
	PR355	Written exam Presentations/seminars				
	PR365	Written exam				
	PR351	Written exam				
	PR361	Written exam				
	PR352	Written exam				
	PR331	Clinical assessment				
	PR321/322/333/ 334/335/336	Oral examination				
	PR312/313/ 314/315/316	Thesis dissertation				
	PR354	Written exam				
	PR347	Written exam				
	PR332/338/339	Logbook and reflective learning portfolio WBA				

		PR363	Written exam				
		PR364	Oral exam Written exam				
4	<b>B1.</b> Evaluate critically current research and advanced scholarship in the discipline.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PR366	Written exam				
		PR362	Written exam				
		PR346	Written exam				
		PR355	Written exam Presentations/seminars				
		PR365	Written exam				

		PR351	Written exam		80% of students pass oral clinical exam on first attempt.		
		PR361	Written exam				
		PR352	Written exam				
		PR331	Clinical assessment				
		PR321/322/333/ 334/335/336	Oral examination				
		PR312/313/ 314/315/316	Thesis dissertation				
		PR354	Written exam				
		PR347	Written exam				
		PR332/338/339	Logbook and reflective learning portfolio WBA				
		PR363	Written exam				
		PR364	Oral exam Written exam				



5	B2. Evaluate methodologies and develop critiques of them and, where appropriate, to propose new hypotheses.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PR366	Written exam				
		PR362	Written exam				
		PR346	Written exam				
		PR355	Written exam Presentations/seminars				
		PR365	Written exam				
		PR351	Written exam				
		PR361	Written exam				

		PR352	Written exam				
		PR331	Clinical assessment				
		PR321/322/333/ 334/335/336	Oral examination				
		PR312/313/ 314/315/316	Thesis dissertation				
		PR354	Written exam				
		PR347	Written exam				
		PR332/338/339	Logbook and reflective learning portfolio WBA				
		PR363	Written exam				
6	<b>B3.</b> Synthesize clinical findings to make a diagnosis and treatment plan or plan patient follow-up and appreciate their	CC510	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b>	80% of students achieve greater than C in all graded course work.	2020 - 2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
	CC503	Written exam	80% of students achieve a Pass grade in Research Dissertation.				
	CC511	Written exam	100% of students demonstrate the set minimal competencies				
	PR362	Written exam					
	PR346	Written exam					
	PR355	Written exam Presentations/seminars					

	limitations and to take advice or refer a patient when appropriate	PR365	Written exam	Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	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.		
		PR351	Written exam				
		PR361	Written exam				
		PR352	Written exam				
		PR331	Clinical assessment				
		PR332/338/339	Logbook and reflective learning portfolio WBA				
		PR363	Written exam				
7	<b>B4.</b> Provide treatment for patients with moderate to difficult requirements.	CC509	Written exam Quizzes Presentation Seminar Technique	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report  <b>Indirect</b> Advisory Group Employers	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	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC504	Written exam Assignment				
		PR366	Written exam				
		PR332/338/339	Logbook and reflective learning portfolio WBA				

				<p>Graduates clinical role/Promotion Applications Quality of recruits to program</p>	<p>expectations" in workplace-based assessment.</p> <p>100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.</p> <p>100% of students obtain a "pass" on case based presentations.</p> <p>80% of students pass oral clinical exam on first attempt.</p>		
8	C1. Maintain a high ethical standard and work in harmony with peers, support staff and teachers with a view to becoming a team leader.	CC503	Written exam	<p><b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation</p> <p><b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report</p> <p><b>Indirect</b> Advisory Group Employers Graduates clinical</p>	<p>80% of students achieve greater than C in all graded course work.</p> <p>80% of students achieve a Pass grade in Research Dissertation.</p> <p>100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based</p>	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PR366	Written exam				
		PR331	Clinical assessment				

		PR332/338/339	Logbook and reflective learning portfolio WBA	role/Promotion Applications Quality of recruits to program	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.		
9	C2. Become life-long learners and educators.	CC503	Written exam	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report	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.	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment				
		PR366	Written exam	<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications			
		PR331	Clinical assessment				
		PR332/338/339	Logbook and reflective learning portfolio WBA				

		PR363	Written exam	Quality of recruits to program	<p>100% of students obtain a "pass" on Clinical Logbook and Learning Portfolio.</p> <p>100% of students obtain a "pass" on case based presentations.</p> <p>80% of students pass oral clinical exam on first attempt.</p>		
10	C3. Appreciate that evidence-based practice underpins patient care.	CC502	Written exam Assignment	<b>Direct Assessment:</b> Written exams, Portfolio, Assignment, Oral exams, Dissertation  <b>Evaluations:</b> Student, Faculty, Practice Assessors, External Examiner Report	<p>80% of students achieve greater than C in all graded course work.</p> <p>80% of students achieve a Pass grade in Research Dissertation.</p>	2020-2021	If less than desired MBRU will review PLOs & CLOs and Assessment Strategy
		CC508	Written exam Presentation Assignment				
		CC509	Written exam Quizzes Presentation Seminar Technique				
		CC504	Written exam Assignment	<b>Indirect</b> Advisory Group Employers Graduates clinical role/Promotion Applications Quality of recruits to program	<p>100% of students demonstrate the set minimal competencies in clinical skills by achieving "meets expectations" in workplace-based assessment.</p> <p>100% of students obtain a "pass" on</p>		
		PR366	Written exam				
		PR362	Written exam				
		PR346	Written exam				

		PR355	Written exam Presentations/seminars		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.		
		PR365	Written exam				
		PR351	Written exam				
		PR361	Written exam				
		PR352	Written exam				
		PR331	Clinical assessment				
		PR321/322/333/ 334/335/336	Oral examination				
		PR312/313/ 314/315/316	Thesis dissertation				
		PR354	Written exam				
		PR347	Written exam				
		PR332/338/339	Logbook and reflective learning portfolio WBA				
		PR363	Written exam				
		PR364	Oral exam Written exam				

## 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 2<sup>nd</sup> 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

<b>Year 1 Semester 1</b>	<b>20 credits</b>	<b>Course code</b>
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
<b>Year 1 Semester 2</b>	<b>20 credits</b>	<b>Course code</b>
Applied Basic Sciences II	1	CC511
Oral Epidemiology	1	CC508
Non-Surgical Root Canal Treatment	1	EN844
Specialty Clinical Training - Clinic	12	EN837
Research Dissertation	3	EN812
Scientific Literature	1	EN822
Radiology and Imaging	1	CC509

<b>Year 2 Semester 1</b>	<b>20 credits</b>	<b>Course code</b>
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
<b>Year 2 Semester 2</b>	<b>21 credits</b>	<b>Course code</b>
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
<b>Year 3 Semester 1</b>	<b>20 credits</b>	<b>Course code</b>
Periodontology and Prosthodontics for Endodontic Specialists	1	EN854
Research Dissertation	5	EN815
Scientific Literature	2	EN825
Specialty Clinical Training - Clinic	12*	EN839
<b>Year 3 Semester 2</b>	<b>19 credits</b>	<b>Course code</b>
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.

## 19.5. 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.

### 19.5.1. Orthodontic Study Plan

<b>Year 1 Semester 1</b>	<b>21 Credits</b>	<b>Course code</b>
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
<b>Semester 2</b>	<b>20 Credits</b>	<b>Course code</b>
Applied Basic Sciences II	1	CC511
Oral Epidemiology	1	CC508
Radiology and Imaging	1	CC509
Research Dissertation	1	OR612
Scientific Literature	1	OR622
Specialty Clinical Training	12	OR637
Growth Assessment – Cephalometric Methods for Assessment of Dentofacial Changes	1	OR644
Dentofacial Orthopedics and Temporomandibular Dysfunction	1	OR655
Orthodontic Materials and Appliances	1	OR656

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

### 19.5.2. Orthodontic Program Course Descriptions

Please refer to Orthodontic Syllabus

## 19.6. 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.

### 19.6.1. Pediatric Dentistry Study Plan

<b>Year 1 Semester 1</b>	<b>21 credits</b>	<b>Course code</b>
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
<b>Semester 2</b>	<b>21 credits</b>	<b>Course code</b>
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

<b>Year 2 Semester 1</b>	<b>20 credits</b>	<b>Course code</b>
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
<b>Semester 2</b>	<b>20 credits</b>	<b>Course code</b>
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
<b>Year 3 Semester 1</b>	<b>19 credits</b>	<b>Course code</b>
Research Dissertation	4*	PD415
Consolidation of Pediatric Dentistry Training 1	2	PD454
Scientific Literature	1	PD425
Specialty Clinical Training	12*	PD439
<b>Semester 2</b>	<b>19 credits</b>	<b>Course code</b>
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.

### 19.6.2. Pediatric Dentistry Course Descriptions

Please refer to Pediatric Dentistry syllabus.



## 19.7. 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.

### 19.7.1. Periodontology Study Plan

<b>Year 1 Semester 1</b>	<b>19 Credits</b>	<b>Course code</b>
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
<b>Year 1 Semester 2</b>	<b>20 Credits</b>	<b>Course code</b>
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

<b>Year 2 Semester 1</b>	<b>20 Credits</b>	<b>Course code</b>
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
<b>Year 2 Semester 2</b>	<b>21 Credits</b>	<b>Course code</b>
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
<b>Year 3 Semester 1</b>	<b>20 Credits</b>	<b>Course code</b>
Research Dissertation	5	PE215
Scientific Literature	1	PE225
Specialty Clinical Training - Clinic	14*	PE239
<b>Year 3 Semester 2</b>	<b>20 Credits</b>	<b>Course code</b>
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.

### 19.7.2. Periodontology Program Description

Please refer to Periodontology syllabus.

## 19.8. Prosthodontics Program Description

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.

### 19.8.1. Prosthodontics Study Plan

<b>Year 1 Semester 1</b>	<b>18 credits</b>	<b>Course code</b>
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
Caries Management, Diagnosis & Treatment Planning	1	PR362
<b>Year 1 Semester 2</b>	<b>19 credits</b>	<b>Course code</b>
Applied Basic Sciences II	1	CC511
Radiology and Imaging	1	CC509
Oral Epidemiology	1	CC508
Research Dissertation	1	PR312
Scientific Literature	1	PR322
Specialty Clinical Training - Clinic	12	PR332
Removable Prosthodontics: Complete Dentures	1	PR355
Basic Implant Surgical and Restorative Techniques	1	PR351

<b>Year 2 Semester 1</b>	<b>20 credits</b>	<b>Course code</b>
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
Toothwear and esthetics	1	PR363
<b>Year 2 Semester 2</b>	<b>20 credits</b>	<b>Course code</b>
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
<b>Year 3 Semester 1</b>	<b>21 credits</b>	<b>Course code</b>
Research Dissertation	8	PR315
Scientific Literature	1	PR325
Specialty Clinical Training - Clinic	12*	PR339
<b>Year 3 Semester 2</b>	<b>21 credits</b>	<b>Course code</b>
Research Dissertation	7	PR316
Scientific Literature	1	PR326
Specialty Clinical Training - Clinic	12	PR339
Consolidation of Prosthodontic Training	1	PR364

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

### **19.8.2. 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)	<i>summative</i>
Personal Development Portfolio	
Clinical Logbook and Reflective learning portfolio	<i>formative / summative</i>
Workplace-based assessments	<i>formative / summative</i>
360° appraisal	<i>formative</i>
Case Report Presentation	<i>formative / summative</i>
Clinical Examinations with patients/case histories	<i>summative</i>

### 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)	<i>summative</i>
Essay assignments	<i>summative</i>
Oral Examination	<i>summative</i>

#### 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 Exercise (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
<b>DOPs</b>	Technical skills, procedures and protocols	Educational/ Clinical supervisors, senior trainee, multi professional team (MPT)	Pre-clinic skills, clinic, operating theatre
<b>CBD</b>	Clinical judgment, clinical management, reflective practice	Educational/ Clinical supervisors, senior trainee	Multiple areas covered by a challenging case
<b>Mini-CEX</b>	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**

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

**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:

Performance	Grade	Score	Quality Points
Excellent	A	90-100	4.00
Excellent	A-	87-89	3.70
Very Good	B+	84-86	3.30
Very Good	B	80-83	3.00
Good	B-	77-79	2.70
Good/ Satisfactory	C+	74-76	2.30
Pass	C	70-73	2.00
Unsatisfactory	*C-	67-69	1.70
Unsatisfactory	*D+	64-66	1.30
Unsatisfactory	*D	60-63	1.00
Failure	F	0-59	0.00
Incomplete	I	-	-
Withdrawal	W	-	-

\*remediation required

## Other grades

Letter Grade	Description
P	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.
TC	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.
I	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 DSSR 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 DSSR 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. 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 DSSR
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 DSSR
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:

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.

### **Photocopy Facilities**

Photocopy machines are available in at Al Maktoum Medical Library and in adjacent stores in DHCC.

### **Student Visa Services**

DSSR 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 DSSR 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 DSSR 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](http://www.dhcc.ae).

### Department of Student Services and Registration

Department of Student Services and Registration (DSSR) at MBRU are tailored to the graduate nature of this institution. The DSSR 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 to recruiting the best available 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 CAA.

	<b>Faculty Name</b>	<b>Designation</b>
1	Abdel Rahman Tawfik	Assistant Professor - Oral Surgery
2	Ahmed Ghoneima	Associate Professor and Chair - Orthodontics
3	Amar Hassan	Professor- Research & Biostatistics
4	Anas Alsalami	Lecturer and Specialist - Pediatric Dentistry
5	Eleftherios Kaklamanos	Associate Professor - Orthodontics
6	Eman Al Nuaimi*	Lecturer and Specialist - Pediatric Dentistry
7	Fatemeh Amir Rad	Lecturer and Specialist - Prosthodontics
8	Haifa Hannawi	Assistant Professor - Periodontology
9	Haitham Elbishari	Assistant Professor - Prosthodontics
10	Iyad Hussein	Clinical Assistant Professor - Pediatric Dentistry
11	Jahanzeb Chaudhry	Associate Professor - Oral and Maxillofacial Radiology
12	Keyvan Moharamzadeh	Professor - Endodontics
13	Maanas Shah	Lecturer - Periodontology
14	Manal Al Halabi	Associate Professor and Chair - Pediatric Dentistry

15	Mawlood Kowash	Associate Professor - Pediatric Dentistry
16	Mohamed Jamal Ahmed	Assistant Professor - Endodontics
17	Momen Atieh	Associate Professor and Chair, Periodontology)
18	Moosa Abuzayda	Associate Professor - Prosthodontics
19	Rashid Elabed	Assistant Professor - Endodontics
20	Samira Diar-Bakirly	Lecturer - Orthodontics
21	Zaid Baqain	Dean and Professor of Oral & Maxillofacial Surgeon

\*On study leave till December 2021

#### **Adjunct Faculty:**

Donald Ferguson: Professor in Orthodontics, European University College  
 Dana Alraeesi: Adjunct Clinical Lecturer, Endodontics  
 Fatima AlDhefairi: Adjunct Clinical Lecturer, Endodontics  
 Nesreen Elbendary: Adjunct Clinical Lecturer, Endodontics  
 Nabeel Alsabeeha: Adjunct Associate Professor, Prosthodontics

#### **Honorary Professor**

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

#### **Part time Faculty:**

Angela Gonzalez: Specialist in Orthodontics  
 Summayah Khawaja: Specialist in Endodontics  
 Tameeza Tejani: Specialist in Prosthodontics  
 Zuhair AlKhatib: Specialist in Endodontics