# MOHAMMED BIN RASHID UNIVERSITY OF MEDICINE AND HEALTH SCIENCES



# College of Medicine Catalog Academic Year 2017-2018



## **COLLEGE OF MEDICINE**

# BACHELOR OF MEDICINE AND BACHELOR OF SURGERY PROGRAM CATALOG FOR ACADEMIC YEAR 2017-18

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## 1. Academic Calendar (2017 - 2018)

The key dates relating to the Calendar for 2017 - 2018 are set out in the table below. MBRU adheres to the academic calendar requirements of the UAE Ministry of Education.

Semester 1 (2017/18)	Dates
New Student Orientation	August 20, 2017 – August 21, 2017
Semester 1	August 20, 2017 - December 7, 2017
Semester 1 – Final Exams	December 10, 2017 - December 21, 2017
WINTER BREAK - 3 weeks	December 24, 2017 - January 11, 2017
Semester 2 (2017/18)	Dates
Semester 2 (2017/18) Semester 2	Dates January 14, 2018 - May 10, 2018
Semester 2	January 14, 2018 - May 10, 2018

#### **UAE Public Holidays 2017-2018)**

Arafat (Haj) Day  Eid-al-Adha - Feast of sacrifice in Islamic tradition  Al-Hijra - Islamic New Year	August 31, 2017 September 1 - September 3, 2017
sacrifice in Islamic tradition	• •
Al-Hijra - Islamic New Year	
,	September 22, 2017
Martyr's Day	November 30, 2017
UAE National Day	December 2 - December 3, 2017
Birthday of the Prophet Mohammed	December 12, 2017
New Year's Day 2017	January 01, 2018
Israa & Miaraj Night	April 13, 2018
Ramadhan begins	May 16, 2018
Eid Al Fitr	June 14 - June 16, 2018

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

Any revisions to teaching and clinical skills scheduling, examination timetables, Public Holidays, and MBRU closure periods, will be published throughout the year on the university website at <a href="https://www.mbruniversity.ac.ae">www.mbruniversity.ac.ae</a>. In addition, during Phase 3 of the MBBS Program, students may elect, or be required for remedial study purposes, to undertake a period of selective study during the summer months. 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 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's academic partner is Queen's University Belfast in the United Kingdom. This partnership aims at enhancing the quality of all aspects of the medical program and supporting the university on strategic and operational issues.

MBRU College of Medicine is listed on the World Health Organization Directory of Medical Schools

#### 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 future of health care in the UAE and the region through offering integrated and innovative health care education and research, 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 & Accountability.
- 3- Excellence: Through Quality, Motivation & 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.
  - \* The MBRU mission, vision and values have been endorsed by the Academic Council and are awaiting final approval of the Board of Trustees in September 2017.

#### Goals

The goals of MBRU are to:

- 3.1.1. Develop high quality healthcare workforce capacity by training and graduating highly skilled and competent healthcare workers who are competitive internationally and practice with high standards of ethics and professionalism.
- 3.1.2. 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.
- 3.1.3. Actively engage with the community through outreach programs that enhance the health status of the society.
- 3.1.4. Achieve international recognition as a center for high quality medical education and research as evidenced by high listing in international academic rankings.

3.1.5. Be readily identified internationally with the values we espouse – high standards of quality, equality, justice, transparency, efficiency and integrity.

#### 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 United Arab Emirates from 15 December 2014 to 14 December 2019.

## 5. MBRU College of Medicine Goals and Outcomes

#### **Goal 1 and Outcomes**

MBRU College of Medicine will graduate highly skilled and competent medical professionals who practice compassionately and ethically, and maintain a high level of professionalism.

Outcome 1A: Graduates secure and complete competitive postgraduate training.

Outcome 1B: Graduates pursue successful careers in medicine.

#### **Goal 2 and Outcomes**

MBRU College of Medicine will create an environment conducive to impactful and innovative medical research.

Outcome 2A: Faculty, students and graduates secure internal and external funding for scholarly activities.

Outcome 2B: Faculty and students disseminate research findings through peer reviewed publications and presentations in professional meetings.

#### Goal 3 and Outcomes

MBRU College of Medicine will actively engage with the community to preserve and promote health.

Outcome 3A: Faculty, staff and students organize and participate in health related community activities.

Outcome 3B: Engagement in community activities result in positive change in the health of the community.

## 6. The Organization

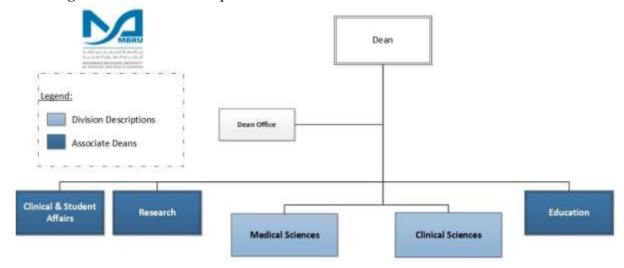
#### 6.1. MBRU Structure

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.



#### 6.2. College of Medicine Structure

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



## 7. Resources and Physical Setting

The Table below provides a summary of available learning facilities at MBRU

Venue	AV/IT	Additional Comments	
Basement 1 Right			
KHMSC Accident & Emergency	IP Camera	Simulation	
Ground Floor Right			
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	
First Floor Right			
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	

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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
First Floor Left		
AMML Meeting Room 1 & 2	TV Screen	8 – 10 Seats
Second Floor Right		
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 Dental Simulation	Nil	Simulation
KHMSC Part Task Trainer Room	Nil	Simulation
Second Floor Left		
AMML Group Study Rooms 1-7	Interactive TV's	6 - 10 Seats
Third Floor Right		
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
Fourth Floor Left		
Computer Lab	70 Desktops 1Front 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

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	specimens.
2 Interactive Displays	Physiology Practicals Biochemistry Demonstrations Molecular Biology Pathology
	2 Interactive Displays

#### 7.1 Physical Teaching Resources and Facilities

#### 7.1.1. Class Rooms

- 7.1.1.1 The Mohammed Bin Rashid Academic Medical Center is the home base for MBRU. Currently, it houses multiple large classrooms accommodating up to 100 students, all dedicated for use by College of Medicine. 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.
- 7.1.1.2. In addition, 10 tutorial rooms each accommodating 8-10 students and the tutor will be added for small group learning.
- 7.1.1.3. The entire building has a wireless connection to the Internet. The students are expected to bring to class either an electronic tablet or a laptop.

#### 7.1.2. 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.

#### 7.1.3. 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.

#### 7.1.4. Computer Assisted Learning Laboratory

MBRU has a 60 station computer laboratory designed for teaching Pathology, Hematology and Anatomy through digital microscopy.

#### 7.1.5. Anatomy Dissecting Room

MBRU has a dissecting room for teaching Anatomy and related subjects. It 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.

#### 7.2 Clinical Teaching Facilities

- 7.2.1 Simulation and Clinical Skills Training Center
- 7.2.1.1 The Khalaf Ahmad Al Habtoor Medical Simulation Center, located on the second floor of the academic building is a training facility where healthcare professionals will receive training to improve quality of care and teamwork in a simulated environment with no risk to patients. The Simulation Center, a 19,500 sq. ft. facility, has all the elements of a virtual hospital. It has two fully functioning Operation Rooms; four ICU Bays including a pediatric bay; and a ward room, three debriefing rooms, a small meeting room and a large training room on the second floor. There is a large skills training and competency testing room (e.g. intravenous cannulation, endotracheal intubation, lumber puncture). In the basement is a complete Emergency Room with facilities for imaging.
- 7.2.1.2 An additional twelve consultation rooms are in the stage of development.
  - 7.2.2 Mohammed Bin Rashid University Hospital

Adjacent and linked to the Mohammed Bin Rashid Academic Medical Center is the Mohammed Bin Rashid University Hospital, which is under construction and will be ready in 2019. At completion, the hospital will have approximately 400 beds covering the core medical specialties. It is a center for clinical training of students of Mohammed Bin Rashid University of Medicine and Health Sciences.

- 7.2.3 Academic Medical Centers
- 7.2.3.1 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.

7.2.3.2 The memoranda of understanding underscore the desire of the parties to collaborate on matters of medical education, research and service provision. Currently, there are agreements with, or letters of support from, Dubai Health Authority, Mediclinic Middle East Group, the Moorfields Eye Hospital and Sulaiman Al Habib Hospital.

#### 7.3 Library Resources

The Al Maktoum Medical Library is housed in the academic building. 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 advanced 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:

Reg	ular Opening Hours
Sundays - Wednesdays	8.00 am - 8.00 pm
Thursdays	8.00 am - 5.00 pm
Saturdays	9.00 am - 2.00 pm
Fridays and Public Holidays	Closed

New students will 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 materials and 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 Databases also have 18 Core Databases including Acland Anatomy, Visible Body, BMJ Clinical Summaries and Web of Science.

#### 7.4 Educational Technology

- 7.4.1. e-Learning Management System (LMS): The University has subscribed to 'Desire2Learn' as the platform for the LMS.
- 7.4.2 Registration and Enrollment: All students, Faculty, and Human Resources

- Management records will be on an electronic platform called 'PowerCampus'.
- 7.4.3 Examsoft platform is used for conducting electronic examinations, archiving question banks and analysing results.
- 7.4.4 Pathxl software provides virtual microscopic teaching in Histology, Anatomic pathology and Haematology.

## 8 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.

#### Queen's University Belfast

MBRU has an academic partnership with Queen's University Belfast (QUB). The goal of the partnership provides quality assurance through offering advice on strategic planning, organization and governance of the university and its Colleges, as well as infrastructure and educational resources development, development of curriculum, faculty recruitment, senior staff recruitment, student recruitment and faculty development programs. The curriculum is developed by MBRU.

QUB is the ninth oldest university in the United Kingdom and is a member of the UK's Russell Group of 24 leading research-intensive universities.

#### **Mediclinic Middle East**

Mediclinic Middle East is part of Mediclinic International, one of the top ten listed private healthcare groups in the world, with 52 hospitals in South Africa, 16 in Switzerland (under the name Hirslanden) and two hospitals and ten clinics in the UAE. Mediclinic City Hospital in Dubai Healthcare City, currently has 229 beds across a range of specialties.

MBRU has a partnership agreement with Mediclinic Middle East to advance their common passion for medical education. Under this agreement, Mediclinic Middle East will make its excellent healthcare facilities and highly trained specialist physicians available for the training of MBRU students. Mediclinic Middle East will assign prepared adjunct faculty members as supervisors for MBRU students who will be embedded in the healthcare teams and participate in healthcare delivery under supervision and with graded responsibilities according to their skills and experience. The training will be based on a jointly developed program with clearly defined learning outcomes.

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

#### **Dubai Health Authority**

The Dubai Health Authority is the major public sector healthcare provider in Dubai. It belongs to the Dubai Government. The healthcare system includes four hospitals and 14 Primary Healthcare Centers supported by a full range of ancillary services. Service is provided in all the core specialties and sub-specialties.

In the future, MBRU will negotiate an agreement with DHA to provide students with clinical experiences building on a Memorandum of Understanding signed between DHA and Dubai Health Care City Authority.

## 9 Admissions Policy

MBRU's admissions policy and procedures is detailed in the *Student Handbook* section 2.1.

#### 10 Financial Policies

The Department of Student Services in collaboration with the Finance Department supports students with financial documentation (e.g. statement of fees) and can advise on issues relating to tuition fees, scholarships, and financial aid.

#### 10.1 Tuition Fees

10.1.1 The university will annually publish the tuition and fees schedule. Any changes in tuition and fees is approved by the University Council and communicated to students at least six months before taking effect. Below is the tuition and fees schedule for Academic Year 2017-2018:

2017-2018	Amount	Schedule
Seat Holding Fee (nonrefundable	10,000 AED	At time of acceptance of
counted towards 1st installment)	10,000 AED	offer
First tuition and fees installment	70,000 AED	September 1, 2018
Second tuition and fees	80,000 AED	January 1, 2010
installment	60,000 AED	January 1, 2019
<b>Total Tuition Fees</b>	160,000 AED	

- **10.1.1.1** The yearly tuition covers all educational expenses, recreational, library, insurance, computer and lab activities. It does not cover the cost of clinical electives taken inside or outside the country.
- **10.1.1.2** Tuition charges are due and payable in full at the specified deadlines of each academic term as per the Schedule of Tuition and Fees. The final responsibility for payment of tuition and fees charged rests with the individual student and their sponsors.
- **10.1.1.3** Students facing financial hardship could ask the Department of Student Services to reschedule payments on an exceptional basis.
- **10.1.1.4** Students with external scholarship for tuition charges must provide written confirmation of the scholarship as specified in the Schedule of Tuition and Fees before the payment deadline. Sponsored students who do not submit the required confirmation of sponsorship and continue in enrollment will assume personal responsibility for all tuition charges and applicable fees.
- **10.1.1.5** Students who fail to pay all applicable tuition charges by the established payment deadline(s) or who are late in paying their fees may be subject to denial of academic services or cancellation of current and/or future registration.
- **10.1.1.6** Unless otherwise specified, fees are due and payable within 15 days of the invoice date.
- **10.1.1.7** Payments of tuition and fees may be made by means specified in the published Schedule of Tuition and Fees, and notification of tuition and fee charges by the Finance Department via the student's university email address constitutes official notice of financial liability.

All additional policies on Tuition fee refunds are detailed in the *Student Handbook*.

## 11 Student Services & Registration

The Department of Student Services and Registration at MBRU provides assistance to students with regards to: orientation, advising and registration, counselling, career planning, accommodation, sports and recreational activities, student life, dining facilities, health services and emergency services. Detailed information on each service is provided in the *Student Handbook* (Section 1.).

#### 12 Students Code of Conduct

The *Student Handbook* sets out details on what students can expect from MBRU and the College of Medicine during their time of study in the University, and what their responsibilities are. Details on General Conduct, Dress Code policy, coeducation conduct and conduct in the classroom are also presented in the Student Handbook (section1).

## 13 Student Grievance Policy

The Student Grievance Policy and appeal mechanisms are provided in the *Student Handbook (section 3)*.

## 14 Academic Integrity

The Student Disciplinary and Appeals Procedures relating to both academic and non-academic offenses are available within the *Student Handbook* (Section 3).

#### 15 Definition of Credit Hour

The credit system conventionally uses hours (contact and credit) per week to measure student load. This is implemented in the basic science years (years 1-3). On the other hand; clinical rotations (years 4-6) are weighted by the number of weeks in a rotation.

One "credit hour" is equal to one "contact hour" (60 minutes) of Lecture time, 2 contact hours (120 minutes) of a Practical or a Tutorial, or three-four contact hours (180-240 minutes) of Field Work or clinical work in a 15-17 week semester. A team based learning (TBL) session is considered to be a tutorial.

For example, in a 15-week semester, a course of three credits where there are two lectures and one tutorial every week will have; 30 contact hours of lecture time and 30 contact hours of tutorial time (i.e. 60 contact hours per semester). A similar three credit hour course but with three lectures per week will have 45 contact hours per semester.

## 16 Definitions of Academic Terminology

The MBBS program is a College degree in Medicine which requires the successful completion of six years of study. Each year is comprised of approximately 40 weeks of study divided over two semesters. There are no separate areas of concentration under the MBBS program at MBRU.

# 17 MBBS Program Learning Outcomes and Completion Requirements

The goal of the MBBS program is to graduate competent and safe physicians well-prepared with the knowledge, skills and behaviors to serve individuals and communities and to pursue postgraduate training programs.

#### 17.1 MBBS Learning Outcomes

The program learning outcomes of the MBBS program at MBRU are derived from the program goal. Each outcome has sub-outcomes which address the various orders of thought according to Bloom's taxonomy. Furthermore, each outcome is aligned to Level 7 of the *QF Emirates*. At the conclusion of the MBBS program, the learner will be able to:

#### 1. Practice in a safe and competent manner

- 1A: Describe normal human development, structure, function and behavior
- 1B: Explain mechanisms of abnormal development, structure, function and behavior underlying human disease
- 1C: Apply principles of normal and abnormal development, structure, function and behavior in the recognition of disease conditions
- 1D: Apply principles of normal and abnormal development, structure, function and behavior in the prevention and treatment of disease
- 1E: Comprehend and apply principles of safe patient care and clinical governance

#### 2. Observe ethical and professional standards

- 2A: Describe the principles of biomedical ethics
- 2B: Apply the principles of biomedical ethics in patient-centered care
- 2C: Demonstrate professional behavior towards self, patients, colleagues, and society

## 3. Practice evidence-based medicine and engage in scholarship and generation of new knowledge

- 3A: Comprehend the principles of research methods and evidence-based medicine
- 3B: Identify and critique relevant research findings and medical literature
- 3C: Formulate a hypothesis and design a research proposal
- 3D: Synthesize and apply key research findings in the care of patients and society

#### 4. Communicate clearly and effectively

- 4A: Comprehend the principles of effective communication with patients and colleagues
- 4B: Demonstrate appropriate oral, written and electronic communication skills with various groups and within different clinical and cultural contexts
- 4C: Demonstrate the ability to manage and resolve conflicts

#### 5. Advocate for health promotion of individuals and communities

- 5A: Comprehend principles of epidemiology and social determinants of health and disease
- 5B: Identify opportunities for health advocacy in society
- 5C: Identify barriers to health care access and their impact at the patient and population level
- 5D: Apply principles of health advocacy in the care of patients and communities

#### 6. Distinguish various healthcare systems and their management

- 6A: Describe principles of healthcare system structure and function
- 6B: Describe the evolution and present trends in healthcare management
- 6C: Evaluate and compare different healthcare systems

#### 7. Educate and share knowledge and skills

- 7A: Comprehend principles of adult teaching and learning
- 7B: Identify opportunities for knowledge-sharing and teaching
- 7C: Demonstrate effective teaching and knowledge transfer to patients, peers, and society

#### 8. Participate effectively in multidisciplinary teams

- 8A: Comprehend principles of effective team work
- 8B: Demonstrate the ability to work effectively and respectfully in a team
- 8C: Critically and honestly evaluate colleagues and self

## 9. Demonstrate commitment to life-long, self-directed learning and performance improvement

- 9A: Recognize gaps in one's own knowledge and skills
- 9B: Identify and engage with opportunities for self-directed learning
- 9C: Apply new evidence to improve clinical practice and services

#### 17.2 Program Completion Requirements

Graduation with an MBBS degree requires the student to pass all the courses with a minimum cumulative GPA of 2.5.

#### 18 General Education

The General Education requirements are designed to add breadth to the student intellectual experience. They ensure that when students complete their MBBS program, they can demonstrate competence in oral and written communication in English; in scientific quantitative and critical reasoning; and in using technology to access, evaluate, organize and communicate information. The following specific courses have been designed to address those competencies:

- 1. ITHS 1126: Innovation in Health Sciences (2 credits)
- 2. LANG 1121: English for Health Sciences (2 credits)
- 3. ETHC 1118: Principles of Bioethics (1 credit)
- 4. MEDC 1115: History of Medicine (1 credit)
- 5. MEDC 3634: Mind and Behavior\* (3 credits)

## 19 Structure and Goals of the MBBS Program

This section sets out an overview of the structure and goals of the MBBS program.

#### 19.1 MBBS Curriculum

The development of the curriculum is underpinned by the following Principles. The curriculum should be:

- aligned with the institutional mission;
- relevant to society;
- outcomes-based;
- inclusive of core components that encompasses the knowledge, skills and aspects of competency that the graduate must master to be competent and safe in the local and global environment;
- making provision for all students to engage with the community and extend

<sup>\*</sup> There is a component that deals with psychology as part of a broader mind and behavior content in this course.

their education in areas of interest beyond the core;

- benchmarked against international standards;
- laying the foundation for ongoing development of the individual throughout his or her career by:
  - a. fostering an "adult learner" attitude that values independent study, reflection on performance, self-directed learning and professional development
  - b. promoting critical thinking
  - c. emphasizing understanding of mechanisms and pathophysiology
  - d. emphasizing experiential, simulation and active case-based and problem-based learning
  - e. offering a blend of biomedical, behavioral and clinical sciences through clinically oriented education;
  - f. offering early purposeful interaction with patients and healthcare systems;
  - g. emphasizing both individual and population health;
  - h. emphasizing the concepts of maintenance of wellness, disease prevention, disease detection and treatment at both individual and population levels;
  - i. focusing on academic achievement and scientific enquiry;
  - i. aligning assessment with learning outcomes.

#### 19.2 Curriculum Structure

The program takes place over a six-year period. There is a strong emphasis within the curriculum structure on acquisition of clinical skills and competence, and simulation based training will be adopted to facilitate this. A key theme is the fostering of self-directed professional development. You will be guided in evaluating and managing your own professional development via the use of professional development portfolios. The MBBS program is divided into three phases, each of which has several components and some periods assigned for "selectives" and "electives":

#### **MBBS Program**

#### Phase 1

Biomedical and
Behavioral Basis of
Clinical Practice
(2 semesters);
reinforced by visits to
healthcare facilities
and interaction with
patients and
healthcare
professionals

#### Phase 2

Mechanisms, Investigation and Treatment of Diseases (4 semesters); involving casebased, and clinical skills such as communication and physical examination, and discussion on clinical and laboratory investigations and treatment, and patient management

#### Phase 3

Clinical Sciences
and Clinical
Clerkships
(6 semesters);
mainly delivered in
the clinical settings
with discussion of
clinical experience
in the tutorial

The Core Curriculum covers the minimum essential knowledge and skills that a newly graduated doctor must have in order to safely and competently assume post-graduate training. It must be covered during the various periods of instruction and will be assessed. This, of course, does not preclude the introduction of additional materials that may enrich learning.

#### 19.2.1. Duration of Program (see section 16 above)

- The duration of study for medical degree in the MBBS Program will be six academic years;
- An academic year consists of at least 30 weeks divided into two semesters;
- Each semester is 15 weeks long.

#### 19.2.2. Optional Summer Study

During the 8 weeks of the summer holiday period, students may be offered optional courses or research experiences, or be required to take remediation courses.

#### 19.2.3. General Education

A General Education curriculum, designed to equip the student with generic skills and provide a broad foundation for specialized medical

training, is offered in the first semester and then interspersed within the program, according to the need in each phase of study (Refer to Section 18 for list of courses).

#### 19.3 Support for Internship Post Graduation

After successful completion of the 6-year program, students will be awarded the Bachelor of Medicine and Bachelor of Surgery (MBBS) degree. Most countries, including the UAE, will require the medical graduates to undertake one year of structured internship with a healthcare provider approved by the relevant local health authorities. After successful completion of one year of Internship, graduates then can apply for full license and will typically continue with further post-graduate training before independent practice. Further details on internship policy will become available in the future.

Internship positions are limited and competitive. MBRU will provide all possible support to assist graduates, national and international, with securing the necessary internships to progress their careers, and will leverage its relationships with programs in the UAE to help facilitate this. The following three Health Authorities in the UAE provide a total of 330 internship opportunities:

- a. The Federal Ministry of Health: 100 positions
- b. The Dubai Health Authority: 110 positions
- c. The Abu Dhabi Health Authority: 120 positions

MBRU will also support students in preparing for their post-graduate training through early career planning, and organizing seminars and career events, to make sure that MBRU graduates are competitive for postgraduate training.

The Career Center will advise students on appropriate methods and activities designed to support graduates of the MBBS program to secure their desired post-graduate training positions.

## 20. Sequencing of Courses within the MBBS Program

## 20.1 Degree Plan - Class of 2022

Phase 1

Code Course Cred Semester 1  LANG1121 English for Health Sciences 2  MEDC1132 Enzymes and Metabolism 3  MEDC1153 Foundation Concepts in Medical Sciences 5  MEDC1124 Fundamentals of Epidemiology & Biostatistics - Part 1	Nil Nil Nil
Semester 1LANG1121English for Health Sciences2MEDC1132Enzymes and Metabolism3MEDC1153Foundation Concepts in Medical Sciences5	Nil Nil Nil
LANG1121English for Health Sciences2MEDC1132Enzymes and Metabolism3MEDC1153Foundation Concepts in Medical Sciences5	Nil Nil
MEDC1132Enzymes and Metabolism3MEDC1153Foundation Concepts in Medical Sciences5	Nil Nil
MEDC1153 Foundation Concepts in Medical Sciences 5	Nil
1	
MEDC1124 Fundamentals of Epidemiology & Biostatistics - Part 1 1	3 711
Turkdamentals of Epidemiology & Biostatistics Turk I	Nil
MEDC1115 History of Medicine 1	Nil
ITHS 1126 Innovation and Technology in Health Sciences 2	Nil
MEDC1117 Introduction to the Practice of Medicine - Part 1 1	Nil
ETHC 1118 Medical Ethics in Islam – Principles and Practice 1	Nil
TOTAL 16	Nil
Semester 2	
MEDC1251 Abdomen, Pelvis and Perineum: Structure and Function 5	
MEDC1124 Fundamentals of Epidemiology & Biostatistics 2 1	Nil
MEDC1232 Genetics and Molecular Biology 3	Nil
MEDC11237 Introduction to the Practice of Medicine -Part 2 1	Nil
MEDC1254 Limbs and spine: Structure and Function 5	Nil
MEDC1233 Thorax: Structure and Function 3	Nil
TOTAL 18	

Phase 2: Mechanisms of Diseases (Years 2 and 3)

	Phase 2		
Code	Course	Credits	Pre-requisite
	Semester 3		
MEDC2341	General Microbiology	4	Phase1
MEDC2342	General Pathology	4	Phase1
MEDC2313	Foundations of Clinical Medicine 1	1	Phase1
MEDC2443	Hematopoietic and Immune System	4	Phase1
MEDC2325	Research Methods 1	2	Phase1
TOTAL		15	
	Semester 4		
MEDC2451	Cardiovascular System	5	Phase1
MEDC2412	Foundations of Clinical Medicine 2	1	Phase1
MEDC2334	Principles of Pharmacology and Therapeutics	3	Phase1
MEDC2444	Renal and Urinary System	4	Phase1
MEDC2425	Research Methods 2	2	Phase1
MEDC2436	Respiratory System	3	Phase1
TOTAL		18	
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conege of wice	$\boldsymbol{\alpha}$		
	Semester 5		
			Phase1, Phase 2
MEDC3551	Digestion and Nutrition	5	(Sem1&2)
MEDC3512	Foundations of Clinical Medicine 3	1	"
MEDC3543	Human Reproduction	4	
MEDC3524	Research Project	2	<i>u</i>
MEDC3525	Skin and Subcutaneous Tissue	2	<i>u</i>
TOTAL		14	
	Semester 6		
			D1 4 D1 0
			Phase1, Phase 2
MEDC3631	Comprehensive Course	3	Phase 1, Phase 2 (Sem1&2)
MEDC3631 MEDC3632	Comprehensive Course Endocrine System	3	·
	<u> </u>		(Sem1&2)
MEDC3632	Endocrine System	3	(Sem1&2)
MEDC3632 MEDC1223	Endocrine System Head and Neck	3 2	(Sem1&2) " "
MEDC3632 MEDC1223 MEDC3614	Endocrine System Head and Neck Foundations of Clinical Medicine 4	3 2 1	(Sem1&2)  " " "
MEDC3632 MEDC1223 MEDC3614 MEDC3635	Endocrine System Head and Neck Foundations of Clinical Medicine 4 Mind and Behavior	3 2 1 3	(Sem1&2)  " " " "
MEDC3632 MEDC1223 MEDC3614 MEDC3635 MEDC3636	Endocrine System Head and Neck Foundations of Clinical Medicine 4 Mind and Behavior Musculoskeletal System	3 2 1 3 3	(Sem1&2)  " " " " " "

Phase 3 Clinical Sciences (120 Weeks) (Years 4-6)

	Phase 3		
Year 4	Family Medicine (including dermatology), Behavioral Medicine, General Internal Medicine, General Surgery and Pediatrics	40 weeks	All Phase 2
	Breaks and Exams	12 weeks	
Year 5	Surgery, Subspecialties (Ophthalmology, Radiology, Anaethesia, ENT) Emergency med, Rehabilitation, Medicine, Pediatrics (including neonatology) Electives Breaks and exams	32 weeks 8 weeks 12 weeks	All Phase 2
Year 6	Clerkships Continued.  Breaks and exams	48 weeks	All Phase 2

## 20.2 Degree Plan - Class of 2023

	Phase 1		
Code	Course	Credits	Pre-requisite
	Semester 1		
LANG1121	English for Health Sciences	2	Nil
MEDC1132	Enzymes and Metabolism	3	Nil
MEDC1153	Foundation Concepts in Medical Sciences	5	Nil
MEDC1114	Fundamentals of Epidemiology & Biostatistics 1	1	Nil
MEDC1115	History of Medicine	1	Nil
ITHS 1126	Innovation in Health Sciences	2	Nil
MEDC1117	Introduction to the Practice of Medicine 1	1	Nil
ETHC 1118	Principles of Bioethics	1	Nil
TOTAL		16	Nil
	Semester 2		
MEDC1251	Abdomen, Pelvis and Perineum: Structure and Function	5	
MEDC1212	Fundamentals of Epidemiology & Biostatistics 2	1	Nil
MEDC1223	Head and Neck	3	Nil
MEDC1214	Introduction to the Practice of Medicine 2	1	Nil
MEDC1254	Limbs and spine: Structure and Function	5	Nil
MEDC1233	Thorax: Structure and Function	3	Nil
TOTAL		17	

Phase 2: Mechanisms of Diseases (Years 2 and 3)

	Phase 2		
Code	Course	Credits	Pre-requisite
	Semester 3		
MEDC2341	General Microbiology	4	Phase1
MEDC2342	General Pathology	4	Phase1
MEDC2313	Foundations of Clinical Medicine 1	1	Phase1
MEDC2334	Principles of Pharmacology and Therapeutics	3	Phase1
MEDC2325	Research Methods 1	2	Phase1
MEDC2336	Genetics and Molecular Biology	3	Phase1
TOTAL		<b>17</b>	
	Semester 4		
MEDC2451	Cardiovascular system	5	Phase1
MEDC2412	Foundations of Clinical Medicine 2	1	Phase1
MEDC2443	Hematopoietic and Immune system	4	Phase1
MEDC2444	Renal and Urinary system	4	Phase1
MEDC2425	Research Methods 2	2	Phase1
MEDC2436	Respiratory system	3	Phase1
TOTAL		19	
	Semester 5		
			Phase1, Phase 2
MEDC3551	Digestion and Nutrition	5	(Sem1&2)

College of Medic	cine Catalog		2017.1
MEDC3512	Foundations of Clinical Medicine 3	1	"
MEDC3543	Human Reproduction	4	
MEDC3524	Research Project	2	"
MEDC3525	Skin and Subcutaneous Tissue	2	<i>u</i>
TOTAL		14	
	Semester 6		
			Phase1, Phase 2
MEDC3631	'Comprehensive Course'	3	(Sem1&2)
MEDC3632	Endocrine system	3	"
MEDC3613	Foundations of Clinical Medicine 4	1	<i>u</i>
MEDC3634	Mind and Behavior	3	"
MEDC3635	Musculoskeletal System	3	"
MEDC3656	Neurosciences	5	<i>u</i>
TOTAL		18	

Phase 3 Clinical Sciences (120 Weeks) (Years 4-6)

	Phase 3		
Year 4	Family Medicine (including dermatology), Behavioral Medicine, General Internal Medicine, General Surgery and Pediatrics	40 weeks	All Phase 2
	Breaks and Exams	12 weeks	
Year 5	Surgery, Subspecialties (Ophthalmology, Radiology, Anaethesia, ENT) Emergency med, Rehabilitation, Medicine, Pediatrics (including neonatology) Electives  Breaks and exams	32 weeks 8 weeks 12 weeks	All Phase 2
Year 6	Clerkships Continued.  Breaks and exams	48 weeks	All Phase 2

## 21. Course Descriptions

This section details course descriptions for Phase 1 of the MBBS program. Please refer to the corresponding course booklets for more details about the courses. None of the courses listed below has a prerequisite, except for courses that are divided into two parts, where successful completion of part one is a prerequisite for part two.

#### 21.2. Course Descriptions - Phase 1

#### Innovation and technology in Health Sciences (Class 2022)

In the current global climate technology plays a major role in everyday life particularly education and healthcare. This course introduces how technology is utilized in acquisition, analysis, and protection of health information necessary for improving quality and efficiency of healthcare. The course also provides an overview of three key areas that influence current healthcare delivery; using technology in accessing information from medical literature; 'design thinking' as a problem-solving approach used to stimulate innovation; and the role of 'social media'.

#### **Innovation in Health Sciences**

This course is about learning innovation and entrepreneurship that can be applied to any high-growth enterprise or other organization. The course is composed of two components: Design Thinking and Entrepreneurship.

#### **English for Health Sciences**

This course aims to provide students with the written and oral communication skills required for their specialized field of study. Students will learn how to synthesize and paraphrase information from a number of sources. They will also learn how to extract relevant information from a journal extract to write a summary-abstract. Medical terminology and language of anatomy are taught mostly through self-study materials.

#### Principles of Bioethics/Medical ethics in Islam; Principles and Practice

This Course will enable the students to develop their understanding of the concepts of Biomedical Ethics and Professional Behavior in the context of the Islamic way of life. They will learn how this impacts on the application of general medical ethics in a specific cultural context. With this understanding, they will appreciate the multi-cultural nature of the patient population and be aware of the need to be an advocate for different segments of the population.

#### **History of Medicine**

This course will introduce students to the historical development of medicine and health related sciences. They will gain an overview of how new ideas have affected the approach to medical care, as well as the contributions made by specific scientists, physicians and surgeons. Although the focus will be on Western medical practice, students will also be introduced to the historical development of medicine in other regions and traditions.

#### **Enzymes and Metabolism**

This course introduces several basic biochemical concepts and examines fuel metabolism and its regulation, i.e. how ATP, the energy-currency of our cells, is produced from different metabolic fuels, the way energy sources are catabolized and stored in the body and how abnormalities can arise in these pathways.

#### Foundation (Foundational) Concepts in Medical Sciences

This course encompasses a range of important concepts which are crucial to the understanding of normal human biology. These concepts have wide applications across all body systems, including the major biological disciplines of anatomy, biochemistry, pharmacology and physiology. Understanding of these concepts at this foundational stage, will allow students to use them as they consider their relevance throughout the rest of the program. Further, this course also provides the student with an opportunity to develop analytical and critical thinking abilities.

#### Introduction to the Practice of Medicine 1 and 2

This Course will introduce the students to the concept of Ethics and Professional Behavior. They will learn about ethical behavior and professional responsibility expected of a physician in good standing towards his/her patients and the society. They will begin to learn about the features of various health systems in the UAE.

#### Fundamentals of Epidemiology and Biostatistics

This is an introductory course for students in medical sciences who have no formal background in epidemiology and biostatistics. Students will be introduced to the basic principles and methods as applied to public health problems. Students will recognize the role of quantitative methods in understanding clinical questions, especially in decision-making. This course will be delivered such that the emphasis will be to acquire a comprehensive understanding of the general concepts and uses of epidemiology and biostatistics as opposed to the underlying mathematical developments.

#### **Limbs and Spine: Structure and Function**

This Upper and Lower limbs course is about the structure of limbs and spine of the human body in relation to their function. The course will also introduce the concept of "living anatomy" as seen on conventional medical imaging and on living human body. There will be a focus on the normal mechanisms involved in locomotion and gait.

Students will be able to develop an attitude of teamwork and self-directed learning through their engagement with the teaching methodology in the course.

#### Thorax: Structure and Function

The Thorax: Structure and Function course provides students with functional knowledge of the structure of the thorax region that will enable further understanding of organ-system courses in phase 2. The course will also introduce the concept of "living anatomy of the thorax" as seen on conventional medical imaging and on living human body. There will be a focus on some normal mechanisms involved in cardiovascular and respiratory functions as well. In addition, students will be able to develop an attitude of teamwork and self-directed learning through their engagement with the teaching methodology in the

#### Abdomen, Pelvis and Perineum: Structure and Function

This course deals with the structure of abdomen, pelvis and perineum of the human body in relation to the function of organs located in those regions. The course also introduces students to the concept of "living anatomy" as related to visualizing structure of the abdomen on conventional medical imaging and on the living. There will be a focus on the normal mechanisms involved in food digestion and formation of urine. Students will be able to develop an attitude of teamwork and self-directed learning through their engagement with the teaching methodology in the course.

#### Head and Neck

This course deals with the general structure of the head and neck regions in relation to the function of organs located in those regions. The course also introduces students to the concept of "living anatomy" as related to visualizing structure of the head and neck on conventional medical imaging and on the living.

#### 21.3. Course Descriptions - Phase 2

#### **General Microbiology**

This course will introduce students to the diversity of microorganisms, including bacteria, parasitic protozoa and helminths (worms), fungi, viruses and prions. It will provide an overview of the structure, genetics, classification, metabolism, life cycle, identification, isolation, cultivation and control of the major groups of microorganisms, focusing on those pathogenic for humans.

#### **General Pathology**

This course will define Pathology as a discipline. It will outline multiple disease etiologies that alter fundamental patho-biologic processes (pathogenesis) and link these with alterations in structure and function (morphology and pathophysiology). Through case illustrations these will be integrated with clinical presentations and outcomes (clinico-pathological correlation).

#### **Foundations of Clinical Medicine 1**

The expected outcomes of this course are to enable students to take and record a patient history using a patient centered systematic approach within the context of present complaint, past, family and social history. They should also be able to record an accurate medication history, perform a structured and relevant general physical examination and clearly record and subsequently present findings.

The concepts introduced in this course will be re-visited and developed further in subsequent courses.

#### **Principles of Pharmacology and Therapeutics**

This course is designed to provide an opportunity for students to understand the basic principles of drug action. Basic topics covered in this course include receptor sites that mediate drug action and the physiological and biochemical mechanisms associated with the response to a drug. It will also cover how to measure drug activity, kinds of drug activity (pharmacodynamics), how drugs are handled in the body (pharmacokinetics), and why drugs affect different people differently (pharmacogenomics and pharmacogenetics). We then will look at a variety of physiological models for the pharmacological actions of drugs, including antimicrobials, antineoplastic agents, in addition to drugs acting on the autonomic

nervous system. Emphasis will be also placed on developing self-directed learning and teamwork skills in the practice of medicine.

#### Research Methods 1

This is the first course in a series of three courses on research methods. This course introduces students to study designs and biostatistics concepts relevant to the interpretation of research findings. The focus is on understanding when a specific statistical test is used in medical research and knowledge on interpreting the medical findings, rather than on the computational aspects. Topics include selecting the appropriate measures of association, outcome measures, and quantitative analysis. By the end of this course, the student will be able to differentiate between the different types of study designs, and list their strengths and limitations. In addition, each student will be able to start thinking about a potential research project that she/he will be able to pursue during the remaining two courses that will proceed it.

#### Genetics and Molecular Biology

This course will explore aspects of molecular biology and genetics in medicine. The impact of this incessantly evolving field, in health and disease will be highlighted. Further, current understandings and new concepts relating to diagnosis, prognosis, prevention and treatment of genetic diseases will also be presented.

#### Cardiovascular System

This course builds on the introductory coverage of normal structure and function in Phase 1 and the understanding of pathological process from the "General Pathology" course to consider the disturbances to normal physiology and the specific changes in end-organ structure that ultimately lead to the pathological hallmarks of cardiovascular disease. The course deals with the study of pathophysiology of common and major diseases of the cardiovascular system, their clinical presentations, and the various approaches to treatment.

#### Foundations of Clinical Medicine 2

This course involves learning the skills of history taking and physical examination related to the organ systems tackled in the semester.

#### Hemopoetic and Immune System

This course will introduce the students to the principles and concepts of hematology and immunology which will guide them in understanding the immune response and its involvement in health and disease. The students will also be introduced to the pathophysiology of common hematological and immunological diseases, building on foundations laid in Phase 1 through clinical correlations that focus on clinically applied hematological and immunological concepts.

#### **Renal and Urinary System**

This course deals with the study of pathophysiology of common and major diseases of the renal and urinary system, their clinical presentations, diagnostic investigations and the various approaches for treatment. The emphasis is on understanding pathophysiological mechanisms rather than on memorizing clinical details. Learning objectives in this course support understanding of the consequences of disease and their management during clinical clerkships.

#### Research Methods 2

This is the second course in a series of three courses on research methods, Research Methods 1 and 2 and the Research Project Course. At the end of this course, the students will be able to develop a full -fledged research proposal, whose first section started during the previous course (MEDC2325). A specific emphasis during the development of the research proposal will be to enable the students to comprehensively develop their research methods section.

#### **Respiratory System**

This course, together with other organ-system course in this phase (phase 2) prepare the learner for clinical clerkships in the next phase (phase 3) of the program. The course addresses physiological and pathologic changes that occur in a variety of respiratory diseases. The focus is on correlating structural, pathophysiological changes with symptoms, signs, and radiological abnormalities that accompany common respiratory diseases.

#### **Digestion and Nutrition**

In this course, the students will identify how gastro-intestinal (GI) structure (Embryology, Gross and Microscopic Anatomy) integrates with function (physiologic mechanisms of GI motility, digestion and absorption, and liver and pancreatic function). This forms the basis on which disease pathophysiology and clinico-pathologic manifestations are illustrated. Students will also apply their basic medical science knowledge to clinical problem-solving.

#### Foundations of Clinical Medicine 3

This course involves learning the skills of history taking and physical examination related to the organ systems tackled in the semester.

#### **Human Reproduction**

This course provides an understanding of the human reproductive system and the female breasts. It will also describe the normal function and structure of the reproductive system and the breast; the etiology, pathophysiology, clinical features diagnosis and principles of management of common reproductive and breast-related conditions as well as infections.

#### **Research Project**

This is the final course in a series of three courses on Research Methods.

In this course, the students will be involved in carrying out the research proposal submitted in MEDC2425. They will collect data, management, and analyze the data, and finally interpret and discuss their results.

#### Skin and Subcutaneous Tissue

The course is designed to provide students with pathophysiological framework for explaining skin and connective tissue disorders. The course involves describing the structure and function of the integumentary system; the skin and related appendages (hair, nails, glands and mucous membrane), and the variety of mechanical, thermal and environmental impacts that affect dermal ageing process.

#### **Endocrine System**

This course involves learning about the nomenclature of endocrine glands and their hormones' sites of biosynthesis, mechanism of action, and

metabolism; their impact on overall body physiology and metabolism; and disease states resulting from various endocrine disorders. The focus will be on the pathophysiology of endocrine dysfunction.

#### Foundations of Clinical Medicine 4

This course involves learning the skills of history taking and physical examination related to the organ systems tackled in the semester.

#### Mind and Behavior

Students will be introduced to psychological and sociological models of behavior, and how these relate to the experience and response to illness in an individual or social/cultural group. They will gain an understanding of the importance of psychosocial factors in health and wellbeing and how these may influence the effectiveness of proposed treatments. Students will learn how to analyze behavioral determinants of illness, especially as applied to substance abuse, self-harm and eating disorders.

#### Musculoskeletal System

This course, together with other organ-system courses in this phase (phase 2), prepares the learner for clinical clerkships in the next phase (phase 3) of the program. The course illustrates pathophysiologic mechanisms of musculoskeletal disorders by addressing developmental, degenerative, infectious and inflammatory conditions of joints, muscles, tendons, and bone in both adults and children. The course introduces the student to basic knowledge and skills in the field of musculoskeletal medicine in order to address diagnostic and therapeutic questions in patient care.

#### Neurosciences

This course is an integrated neuroanatomy, neurophysiology, neuroradiology, neuropathology and neuropharmacology course covering normal and disturbed function. It includes study of the central and peripheral nervous systems, sensory, autonomic and motor neuroscience, special senses and provides a broad exposure to the pathophysiology of nervous system disorders, as well as signs and symptoms of neurological disorders.

#### 'Comprehensive Course'

This course will integrate the knowledge of fundamentals of pathophysiology of disease with the case-based teaching of the diseases of systems. Through illustrative clinical presentations it will provide horizontal and vertical integration of knowledge demonstrating the complexity of diseases that affect multiple systems either through the pathology of a primary disease and its complications or through co-existence of multiple diseases.

## 22. Student Assessment and Progression

The aims of students' assessment at MBRU is to satisfy student achievement and progression, promote subsequent learning through feedback improve the quality of the curriculum (courses and programs) and evaluate the effectiveness of the teaching process.

#### 22.1. Summary of Students' Assessment and Progression Regulations:

- Student progress will be appraised through formative and summative assessments; formative assessments monitor student learning and provide ongoing feedback that can be used by students to enhance their learning and instructors to improve their teaching. Summative assessments, on the other hand, aim at evaluating students learning by comparing it to learning outcomes
- Standard setting, norm and criterion referencing will be used in summative assessments as appropriate
- Course assessment includes two components: in-course assessment and end of course assessment. In-course assessment comprises 40-60% of the total assessment. The examination at the end of the course comprises the remainder of the grade (i.e 40-60%)
- Any deviation from the suggested range above must be justified by the course director and approved by the curriculum committee
- In order to pass the course a student must pass each of the knowledge and clinical skills components (for courses with a skills component)
- In order to progress to the next Phase, the student must have scored a cumulative weighted average (cGPA) equal to or greater than 2.5
- The exit degree of MBBS (Bachelor of Medicine and Bachelor of Surgery) is granted if the student scores a cGPA equal to or greater than 2.5
- As a general progression rule, the maximum duration within which to successfully complete any phase shall be equal to the normal duration of the phase plus an additional one year.

#### 22.2. Guidelines

The following guiding principles in designing assessments instruments are followed by course coordinators and clinical instructors at MBRU:

- ensuring linkage of assessment to course objectives (Knowledge, Skills, Competency)
- employing diverse assessment methods
- basing their marking and grading on pre-defined outcome criteria
- communicating assessment criteria to students
- providing timely, meaningful, and helpful feedback to students
- ensuring exams are proportional to the course workload
- ensuring contextual use of assessment instruments
- ascertaining assessment tools are appropriate for the competencies being measured
- ascertaining standard setting is criteria-based (criterion referenced standard)

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#### 22.3 Weights of assessments

#### The weightings of examination components in a course is normally as follows:

- In-course examinations = 40% 60% of total assessment
- End-course examinations = 40% 60% of total assessment.
- Any deviation from the suggested range above must be justified by the course director and approved by the curriculum committee

#### Pre-requisites and co-requisite courses

• These are identified in the degree plan for each phase (see tables 1 and 2)

#### 22.3 Progression Regulations in Phase 1

Below are the courses for phase 1 along with their credit load.

	Phase 1		
Code	Course	Credits	Pre-requisite
	Semester 1		
LANG1121	English for Health Sciences	2	Nil
MEDC1132	Enzymes and Metabolism	3	Nil
MEDC1153	Foundation Concepts in Medical Sciences	5	Nil
MEDC1114	Fundamentals of Epidemiology & Biostatistics 1	1	Nil
MEDC1115	History of Medicine	1	Nil
ITHS 1126	Innovation in Health Sciences	2	Nil
MEDC1117	Introduction to the Practice of Medicine 1	1	Nil
ETHC 1118	Principles of Bioethics	1	Nil
TOTAL		16	Nil
	Semester 2		
MEDC1251	Abdomen, Pelvis and Perineum: Structure and Function	5	
MEDC1212	Fundamentals of Epidemiology & Biostatistics 2	1	Nil
MEDC1223	Head and neck	3	Nil
MEDC1214	Introduction to the Practice of Medicine 2	1	Nil
MEDC1254	Limbs and spine: Structure and Function	5	Nil
MEDC1233	Thorax: Structure and Function	3	Nil
TOTAL		17	

#### 22.4 Progression within Phase 1:

- The maximum duration within which to successfully complete phase 1 shall be 2 years (4 semesters).
- At the end of regular semester 1 or 2;
  - o If a student has failed in one or more courses, they shall re-sit the end-course examination only. This will be in the summer break. A remedial/coaching program should be organized before the re-sit examination.
- A student may re-sit an examination only once in an academic year.
- There shall be no cap on the grade obtainable in a re-sitexamination.
- If they fail any re-sit exam, they shall repeat the failed course (s) when available provided the maximum duration within which to successfully complete phase 1 is not exceeded.

#### 22.5 Progression from Phase1 to Phase2

- A student may repeat a course in phase 1 only once.
- To progress to phase 2 a student shall:
  - o successfully complete all courses in phase 1 within the stipulated maximum duration of the phase (4 semesters).
  - o achieve a cumulative grade point average (cGPA) of 2.5 or higher at the end of phase 1.

• If a student passed all courses in the phase with a cGPA less than 2.5, they must repeat some courses passed so as to raise their cGPA provided they do not exceed the stipulated maximum duration for the phase.

# Assessment and Progression Regulations in Phase 2

Below are the courses for phase 2 along with their credit load.

	Phase 2			
Code Course		Credits	Pre-requisite	
	Semester 3		-	
MEDC2341	General Microbiology 4		Phase1	
MEDC2342	General Pathology 4 Pha		Phase1	
MEDC2313	Foundations of Clinical Medicine 1 1 Phase		Phase1	
MEDC2334	Principles of Pharmacology and Therapeutics	acology and Therapeutics 3 Phase1		
MEDC2325	Research Methods 1 2 Phase1		Phase1	
MEDC2336	Genetics and Molecular Biology	3	Phase1	
TOTAL		17		
	Semester 4			
MEDC2451	Cardiovascular system	5	Phase1	
MEDC2121	Foundations of Clinical Medicine 2	1 Phase1		
MEDC2443	Hematopoietic and Immune system	4	Phase1	
MEDC2444	Renal and Urinary system	4	Phase1	
MEDC2425	Research Methods 2	2	Phase1	
MEDC2436	Respiratory system	3	Phase1	
TOTAL		19		
	Semester 5			
			Phase1, Phase 2	
MEDC3551	Digestion and Nutrition	5	(Sem1&2)	
MEDC3512	Foundations of Clinical Medicine 3	1	1 "	
MEDC3543	Human Reproduction	4		
MEDC3524	Research Project	2	<i>u</i>	
MEDC3525	Skin and Subcutaneous Tissue	2	"	
TOTAL		14		
	Semester 6			
			Phase1, Phase 2	
MEDC3631	'Comprehensive Course'	3	(Sem1&2)	
MEDC3632	Endocrine system	3	"	
MEDC3613	Foundations of Clinical Medicine 4	1	<i>u</i>	
MEDC3634	Mind and Behavior	3	"	
MEDC3635	Musculoskeletal System	3	"	
MEDC3656	Neurosciences	5	"	
TOTAL		18		

# 22.6 Progression within Phase 2:

• The maximum duration within which to successfully complete phase 2 shall be six semesters.

- Once progressed to phase 2, a student shall not retake passed phase 1 courses in order to improve his/her grades
- A student shall progress within the academic year from semester to semester subject to passing any pre-requisite courses.
- If a student fails one or more courses in a semester, they shall re-sit the endcourse exam during the summer break. A remedial/coaching program should be organized before the re-sit examination.
- A student may re-sit an examination only once in any academic year.
- At the end of the re-sit;
  - o If a student fails 1 or 2 courses, they may carry over the failed courses to year 3.
  - o If a student fails 3 or more courses, they must repeat the failed courses before proceeding to year 3.
- Regardless of the number of courses failed, there must be sustained academic advising provided to such students.

# 22.7 Progression from Phase 2 to Phase 3

- The maximum duration to complete phase 2 shall be six semesters.
- To progress from phase 2 to phase 3 a student shall;
  - o Successfully complete all courses in phase 2.
  - o Achieve a cumulative grade point average (cGPA) of 2.5 or higher at the end of phase 2.
  - Pass the "comprehensive course" at the end of phase 2. (see separate description)

## Add/drop period

This is the period within which a student may add or drop a course. If a course is dropped within this period, it will not be shown on the student's transcript. The deadline to add/drop a course shall be 2 weeks from the beginning of classes in the semester.

#### **Course Load**

In regular semesters, a student shall normally register in 4-8 courses (16-20 credits) concurrently.

#### Lecture (credit: contact hour ratio = 1:1)

Presentation of theoretical or conceptual material in a formal and generally non-interactive environment. Normally a lecture hour will require about 2 hours related research, reading and follow-up. A ratio of one contact hour to one credit is maintained.

#### Seminar (credit: contact hour ratio = 1:1)

Small group presentation of learning material where student research and presentation forms a major portion of course materials and activity. Normal ratio of contact to credit hours is 1:1.

#### **Tutorial (credit: contact hour ratio = 1:2)**

Supervised small group interaction that includes problem solving and discussion sessions. Normal ratio of contact to credit hours is 2:1. (Optional work sessions with no credit do not carry a course code). A Team-based learning activity (TBL) is considered as a tutorial.

# Laboratory (Practical) (credit: contact hour ratio = 1:2)

Supervised, hands-on application of lecture material or acquisition of skills in a laboratory environment. Normally a ratio of two contact hours to one credit is maintained. In cases where warranted by the nature of the course material, a ratio of 3:1 or 4:1 may be designated by the faculty.

# Field or Work Placement (credit: contact hour ratio = 1:3-4)

Supervised hands on application of lecture material or acquisition of skills through placement in an existing work setting. The instructor provides overall direction and follow-up, day-to-day supervision is provided by the on-site employer or agency. Ratio of contact to credit hours is 3:1 or 4:1.

# Credit weight in rotations (credit: week ratio = 1:1)

For the purposes of credit weighting in phase 3 rotations, a credit is equivalent to one week of rotation.

#### 22.8 Academic Probation

A student shall be placed on academic probation if his/her academic performance is below the threshold (cGPA 2.5) for successful progression to the next phase of the program. Such a student shall be required to have a documented interview with their academic advisor and any supportive and corrective measures noted before registering for the next semester. These may include any or all of the following:

- referral to student services for counselling
- reduction of course load in the next semester
- postponement of study so as to address identified non-academic needs
- supplementary language or study skills courses

#### 22.9Assessment Grades

#### **Grade Descriptions**

The grades for the MBBS courses are described as follows:

- **A** Exceptional performance; all course objectives achieved; objectives met in a consistently outstanding manner (A and A-).
- **B** Very good performance; significantly more than the majority of the course objectives achieved (majority being at least two-thirds); objectives met in a consistently thorough manner (B+, B and B-).
- C Satisfactory performance: at least the majority of course objectives achieved; objectives met satisfactorily (C+, C and C-).
- D Minimally acceptable performance: less than the majority but more than the minimum required course objectives achieved; objectives met at a minimally acceptable level (D+ and D).
- F Unacceptable performance: minimum required course objectives not met; objectives not met at a minimally acceptable level; no credit earned (F).

# Other Grade designations

The following grade designations shall form part of the overall University grading system, but shall not carry numeric value.

# I -Incomplete (x)

The 'Incomplete' grade shall be used when the student has been prevented by circumstances beyond their control (e.g. illness, accident or family emergency) from successfully completing all course components, in-course examinations or sitting for the final end-course examination.

The incomplete grade should be converted to the usual A-F grade scale or Pass/Fail within four weeks of the last date of final examinations. Any exception to this rule shall only be approved by the student assessment and progression committee and the Dean.

# (W) Withdrawn

A 'W' 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 <u>6</u> weeks from the beginning of classes in the semester.

# (FW) Fail withdrawn

A 'FW' shall be assigned to a student who withdraws formally from a course after the prescribed deadline.

# (TC) Transfer Credit

A 'TC' shall be awarded to a student who has been granted credit from elsewhere. These credits shall contribute to the total required for graduation in a particular degree program, but shall not contribute to the grade point average.

#### (AU) Audit

An 'AU' shall designate a course registration with audit status. This status must be declared at the time of registration.

# (P/F) -Pass/Fail

A 'P' shall be assigned for a course that is not graded on the A-F scale, but does carry credit value in a degree program.

# IP - In progress

Shall be assigned to any course covering more than one semester. After the first semester, the 'IP' grade is shown against the course on the student's transcript. At the end of the second semester an A-F or Pass/Fail grade replaces the 'IP' grade.

# 22.10 Grading System

MBRU uses a letter based grading system to report course grades. Assessments are typically recorded on a percentage scale (0-100) and converted into a letter grade as outlined below. The GPA is derived from the weight of each letter grade and course credit hours.

Grade	Grade points	Definition	
A	4.00	This grade is awarded for an achievement considered by	
A-	3.67	content experts as outstanding relative to the level necessary to meet course requirements. i.e. (Range of A to A-)	
B+	3.33	This grade is awarded for an achievement considered by	
В	3.00	content experts as significantly above the level necessary to	
В-	2.67	meet course requirements. i.e. (Range of B+ to B-)	
C+	2.33	This grade is awarded for an achievement considered by	
C	2.00	content experts as meeting the course requirements in all	

Grade	Grade points	Definition
C-	1.67	respect. i.e. (Range of C+ to C-)
D+	1.33	This grade is awarded for an achievement considered by
D	1.00	content experts as worthy of credit even though it fails to meet fully the course requirements. i.e. (Range of D+ to D)
F	0.00	This grade is awarded for an achievement considered by content experts as representing failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I (Incomplete)

### 22.11 Appealing an Assessment Process

A student may make a written appeal regarding the process of the assessment in any course. The appeal should be addressed to the Dean within 72 hours of the release of the examination results. The appeal should identify specific and objective grounds for the grievance as they pertain to the process of assessment. The Dean will direct the students' assessment and progression committee to review the circumstances in consultation with the Course Director and other relevant faculty before making a decision, typically within five working days, to forward the appeal to the Assessment and Progression Committee. Possible outcomes from the deliberation of the committee include: upholding the grade, repeating the assessment, adjusting the grade, or seeking an assessment by another faculty not involved with the course.

# 23 Examination Regulations

#### 23.1 Responsibilities of the College Examination Committee

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

1. Ensuring University and College regulations are adhered to

- 2. Reviewing reports from Course Coordinators
- 3. Reviewing External Examiners' reports (if applicable) in matters related to the examination
- 4. Verifying with Course Coordinators that examination papers are vetted
- 5. Reviewing a sample of examination question papers
- 6. Confirming that appropriate standard-setting procedures are adopted
- 7. Reviewing examination 'item' performance
- 8. Reviewing the distribution of grades
- 9. Recommending improvements and ratifying changes to examination process
- 10. Approval of timetables and invigilation guidelines of final examinations
- 11. Receipt and consideration of final examinations results
- 12. Recommendation, in consultation with Course Coordinators, of supplementary examinations and/orre-sits.
- 13. Handling misconduct in examinations
- 14. Liaising with appropriate bodies in cases of student appeals that relate to examinations
- 15. Recommending amendments to the College examinations policy
- 16. Any other duties that may, from time to time, be assigned to the Committee

#### 23.2 Examination Guidelines

#### Design

Examinations should be both formative and summative. The methods of assessment used will be dictated by the purpose of the assessment.

Summative assessment is any form of assessment that will contribute to the final grade of a student. Guidelines for conducting summative assessments are as follows:

a. Each course Coordinator shall draw out a blueprint of course objectives and the examination instruments to be used to test these objectives. Multiple methods are usually required to achieve blueprint objectives. The different examination instruments allow a balance of strengths and weaknesses of each method.

- b. As much as possible, questions should assess higher-order thinking and not just a simple recall of information
- c. For skills/performance-based assessments, properly constructed checklists and/or rating scales should be used. Tasks should be as clinically authentic as possible.

#### 23.3 Review of Examinations

For all exams (in-course and final), exam questions/stations/cases should be reviewed and emended by the course/departmental Examinations Committees before the examination takes place.

#### 23.4Standard Setting

For each course, a defensible standard-setting method should be used by trained faculty. Arbitrary methods should not be used. The standard-setting procedure should be declared to the College Examinations Committee.

# 23.5 Marking of Examinations

MCQ's shall be marked electronically on the Examsoft platform and subjected to item analysis. For short notes and essays, model answers should be provided and used as the basis for marking and feedback to students. Several examiners should be available, but one examiner should mark the same question for all students for consistency. Double marking is encouraged. For Objective Structured Clinical Examination (OSCE) stations and short cases, properly designed checklists and rating scales should be used. Several examiners should be available. Each OSCE station should be assigned to one examiner.

## 23.6 Grades and Grading

Letter grades shall be used to describe the achievement level attained within a particular course. A final semester grade shall be based on continuous assessment throughout the semester as well as a final examination. A final examination is customary but may not be considered necessary in certain types of courses. Additional details are available in section 22.1.

#### 23.7 Item Analysis and Test Statistics

Student performance on exam questions should be analyzed using appropriate item analysis software by the Coordinators. Results of these analyses should be discussed

by the relevant committees to assist in making informed decisions about the assessment process. For all examinations used by instructors, reliability indices should be determined and the data used to improve on the assessment process in the College.

## 23.8 Feedback (to students) on examinations

Feedback on in-course examinations should be given to students within 1 week of the examination. Feedback should not involve the release of questions but a discussion of points of weaknesses with students. Final examinations will not be discussed with students

# 23.9 Training of Students in Examination Methods

Students should be familiarized with the type of examinations in the College. Practice questions should be provided by the concerned coordinators.

#### 23.10 Access to Old/Previous Exams

Students should not have access to examination questions.

# 23.11 Repeat Exams

If a student is eligible for a resit/supplementary exam, this exam should be cleared after a remedial activity/course as may be prescribed by the concerned parties (see assessment and progression document). The format of the repeat exam should be exactly the same, except for content, as the failed exam.

#### 23.12 Absenteeism from Examinations

Please refer to the attendance policy in the MBRU Student Handbook. Additionally, the following will apply to the College of Medicine:

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 College examinations committee.

<u>Note</u>: 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.

#### 23.13 Misconduct in Examinations

Please refer to the policy in the MBRU Student Handbook. Additionally, the following procedure of reporting misconduct will be applied in the College of Medicine:

Misconduct in examinations should be reported to the Examinations committee by the senior invigilator of the examination during which the malpractice occurred. The Examinations Committee will deliberate on the report. Thereafter, a recommendation will be made to the Dean.

#### 23.14 Online Exams

#### 23.17.1. General Conduct of Students

- A- Students must not indulge in any behavior or conduct that may disturb other candidates or disrupt the smooth progress of an examination.
- B- Students are not permitted to smoke in any part of the examination room.
- C- 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.
- D- 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.
- E- Students are not allowed to take into the examination room electronic transmission devices such as mobile phones, pagers, PDAs, or any digital storage media such as flash drives or CD.
- F- Students are not allowed to take into the examination hall paper of any sort. A Plain sheet of paper (or similar material) shall be provided in the examination hall should any student require it.
- G- Students must be at the venue of the examination at least 10 minutes before exam commencement.
- H- 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.
- I- 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.
- J- Students are permitted to use only personal non-programmable electronic

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calculators in an examination provided they are silent in operation and have an independent power supply.

K- Any suspected breach of the foregoing regulations will be investigated by the College.

# 23.18 Invigilation

Invigilation is part of the responsibilities of all faculty and biomedical scientists. Course Tutors and Course Coordinators do not normally invigilate their own course examinations. In any examination, the most senior and experienced faculty member will act as the senior invigilator with other academic and biomedical staff as members of the team. The ratio of invigilator to student should range from 1 to 20 to 1 to 30, depending on the examination venue.

The Course Coordinator must be available during the examination so that the senior invigilator may contact them for clarification. At the end of the examination, the senior invigilator should personally deliver the scripts to the Course Coordinator.

# 23.18.1 Duties of the Senior Invigilator:

The Senior Invigilator shall be responsible for the entire proceedings of the examinations to which he/she is appointed. Specifically, the Senior Invigilator shall:

- On the date of the examination, personally and accompanied by a second invigilator, collect the prescribed examinations materials from the Examinations Office no later than one hour prior to the start of the examination and be at the venue at least 30 minutes before the commencement of the examination
- Prior to the commencement of the examination, require each student to deposit, at a designated point, any textbooks, notebooks, papers, baggage, files, or mobile telephones, as they enter the examination room
- At the appropriate time, start the examination. Remind students of the duration of the examination and to write their names and I.D. numbers clearly on the first page or cover page
- Inform students when they have reached the following stages in the examination: half time, three-fourths of time, and 5 minutes remaining
- Submit examination incident reports to the Examinations Officer who reports to the Chairman of the Examinations Committee
- Allow students who have completed the examination to leave the venue after confirming the submission on the e-platform.

# 24. Listing of Faculty

MBRU College of Medicine 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* and the previously approved MBRU Policies on Faculty Affairs.

Full time faculty members will, as core teachers, have a major role in the design and delivery of teaching. In addition, MBRU College of Medicine 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.

# COLLEGE OF MEDICINE FACULTY LIST

Faculty Name	Designation	
Abiola Senok	Associate Professor - Microbiology & Infectious	
	Diseases	
Aida Azar	Associate Professor – Epidemiology	
Alawi Alsheikh-Ali	Dean - College of Medicine	
	Professor - Cardiovascular Medicine	
David Hickey	Professor - Surgery	
Essa Kazim	Associate Professor - Surgery	
Farhad Janahi	Assistant Professor – Anatomy	
Ibrahim Inuwa	Professor - Anatomy	
Laila Alsuwaidi	Assistant Professor - Molecular Hematology	
Mohamad Alameddine	Director - Strategy and Institutional Excellence	
	Associate Professor - Health Management and	
	Policy	
Mohammed Uddin	Assistant Professor - Human Genetics	
Mutairu Ezimokhai	Provost	
	Professor of Obstetrics and Gynecology	
Nerissa Naidoo	Assistant Professor – Anatomy	
Norbert Nowotny	Professor - Microbiology	

# 25. Professional behavior and Student Fitness to practice

Medical students enjoy special privileges which come with some responsibilities and expectations by the society. Because of this, medical students need to be aware of the higher standards of professional behavior. MBRU College of Medicine 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 medical 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.

# 25.1. Expectations for appropriate 'Fitness to practice'

# 25.1.1. Displaying professional conduct

Medical students should acquire and demonstrate the types of behavior that mark them as fit to practise as doctors 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

# 25.1.2. Providing good clinical care

- Being able to provide good clinical care is fundamental to becoming a
  doctor. This objective should guide a student's behaviour in both their
  clinical and academic work. Medical students should reflect on how they
  can support and promote good clinical care as part of their medical
  education.
- In order to demonstrate that they are fit to practice, students should:
  - recognise and work within the limits of their competence and ask for help when necessary

- accurately represent their position or abilities
- make sure they are supervised appropriately for any 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.

# 25.1.3. Maintaining good medical 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 doctors 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 and the local hospitals
  - 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

 make sure they can be contacted and always respond to calls in relation to care of patients or their own education.

# 25.1.4. Engaging in teaching and training

- Medical education has strong professional and academic aspects to it.
   Medical students must engage with patients and gain experience in clinical settings.
- Doctors and students must be willing to contribute to the teaching, training, appraising and assessing of students and colleagues.

- They should be honest and objective when appraising self and others
- In order to demonstrate that they are fit to practice, students should:
  - demonstrate basic teaching skills
  - be aware of the principles of education in medicine
  - be willing to contribute to the education of other students
  - give constructive feedback on the quality of their learning and teaching experiences.

#### 25.1.5. Building ethical and respectful relationships with patients

- Medical students will have extensive contact with patients during their medical course 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, teaching or research.
- Patients have a 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 behaviour 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 student being involved in their care
  - make sure they are clearly identified as students

- 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.

#### 25.1.6. Working collaboratively with colleagues

- Medical 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.
- Doctors and students must develop skills to work in multidisciplinary 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 doctors and students protect patients from harm posed by another colleague's behaviour, 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 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, medical practitioners and other healthcare workers, with the appropriate person if patients are at risk

# 25.1.7. Demonstrating ethical behavior

- Good medical practice requires doctors to make sure that their behaviour at all times justifies the trust that patients and the public place in the medical 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 plagiarise others' work or use their own work repeatedly in a way that could mislead
- be honest and trustworthy in any financial dealings, especially if they are managing finances, 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 other hospitals or organisation 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, hospitals or other health organization.

# 25.1.8. Understanding risks associated with their own health

- It is important that medical students are aware that their own poor health may put patients and colleagues at risk.
- Good medical practice requires doctors 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.

# 25.1.9. 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, religion, or sexual orientation
- 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.

#### 25.2. Consequences of breaching the fitness to practice

If there are grounds for concern as to the fitness of the medical student for medical practice and upon investigation the student was found to be in breach of the fitness to practice code, the fitness to practice committee 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 as a medical student
- 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

# 25.3. Policies and procedures for dealing with suspected breaches of Fitness to Practice

#### **5.3.1.** Committee for Fitness to Practice

The following committees 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:

- review the Medical Students' Code of Conduct on a regular basis.
- initiate the process for dealing with a report of infringement of Code of Conduct on instruction from the Dean
- raise the independent ad hoc Investigation Committee when needed
- adjudicate on the basis of the Report of the Ad Hoc Investigation Committee

## 5.3.2. Membership:

- Associate Dean for Education (ex-officio)
- Four faculty members, elected by Faculty
- A student representative selected by MBRU students' association
- The Dean appoints the Chairperson from among the membership.

• The Committee on Fitness to practice shall meet at least once per term and whenever the need arises.

#### 5.3.3. The ad hoc Investigation Committee

An ad hoc Committee is constituted for each case and it reports to the Committee on Fitness to practice. The ad hoc committee mandate is to gather information and evidence sufficient to enable the Committee on Fitness to practice to make a decision on the existence and seriousness of the breach of the Code of Conduct.

# 5.3.4. Membership:

Three members with appropriate expertise to conduct the investigation, appointed by the Committee for Fitness to practice. None shall be a member of the Committee on Fitness to practice.

#### 5.3.5. The ad hoc Dispute Resolution Committee

An ad hoc Committee established by and reporting to the Dean constituted for each case. The mandate of the ad hoc dispute resolution committee is to determine whether due process has been followed in handling the allegation and receive new facts if these become available. The committee will also consider the appeal from the student in the event of a dispute regarding the outcome of adjudication.

# 5.3.6. Membership:

This committee is made up of three members drawn from the College Dispute Resolution Panel.

- One nominated by the Dean, who shall Chair the Committee and submit reports.
- One member nominated by the student.
- One member nominated by the Committee on Fitness to practice.

# 25.4. Procedure for handling an allegation of a breach to fitness to practice by a medical student

The handling of an allegation of misconduct must be confidential, expeditious and strictly in accordance with laid down process as follows: Preliminary Evaluation, Investigation, Adjudication, Appeal.

# 25.4.1. Preliminary Evaluation

- A report of allegation of potential infarction of the Code of Conduct shall be directed to the Dean, who will evaluate and share with the Chairperson of the Committee on Fitness to Practice, if he/she considers that there are enough grounds to proceed.
- Anonymous allegations shall not normally be considered. If the nature of the allegation makes anonymity of the reporter expedient, the name and identification of the author will be removed from any written document but be known to the Dean

- Within two weeks of receiving a complaint, the Committee on Fitness to practice shall determine whether:
  - the matter should be dealt with informally
  - investigation should proceed
  - o any action regarding the status of the student should be taken; for example:
  - continue his or her studies without limitation
  - continue his or her studies under specified limitations and conditions
  - be prohibited from entering specified clinical facilities as a medical student
- The Chairperson may, during the proceedings, review and change a decision regarding a medical student's status.
- The student may appeal to the Dean if dissatisfied with the decision of the Committee.
- The Dean may refer the appeal to the Adjudication Committee. Pending any such adjudication the Committee's decision shall remain in force.
- Any member (including the Chairperson) of the Fitness for Practice Committee that has any involvement or interest in the case arising other than by way of rules of procedure, shall stand down from the Committee while the case is being considered, and another member of the Committee shall be appointed.

#### 25.4.2. Investigation

- The Fitness to practice Committee shall set-up an ad hoc Investigation Committee. The membership shall not include anyone with previous involvement in the case.
- The Chairperson of the Committee on Fitness to Practice shall write to inform the medical student concerned that an investigation of the student's fitness for practice is going to take place stating the nature of the concern and the grounds for launching the investigation.
- The ad hoc Investigation Committee shall investigate the allegations associated circumstances and submit a written report prepared and submitted by the Chairperson of the ad hoc Investigation Committee to the Chairperson of the Fitness to Practice Committee within two weeks. The report shall be limited to facts, without judgement.

- The medical student may be accompanied by a member of the MBRU community of his/her choice.
- The student shall be given the opportunity to comment on the accuracy of the facts gathered by the ad hoc Investigation Committee by appending his/her signature to the report.

# 25.4.3. Adjudication

- The medical student shall be required to attend the meeting for Adjudication in person.
- The medical student shall inform the Chairperson of the Committee on Fitness to Practice in writing of the details in advance of the meeting if he/she has good cause to object to the membership of the Committee.
- The Chairperson shall decide on whether to advise the Committee that the member(s) should be replaced and shall inform the medical student accordingly.
- The adjudication may proceed in the student's absence, if the student fails to attend the meeting without reasonable explanation. The Committee on Fitness to Practice shall have discretion to decide what constitutes a "reasonable explanation".
- The Committee or the medical student may invite anyone who may have information relevant to the case to attend the adjudication meeting to give evidence in writing or in person.
- The meeting shall be held in private and all proceedings shall be confidential
- The Committee shall determine its own procedure for the conduct of the meeting but shall include the following elements:
  - A statement of the allegation and the findings of the ad hoc Investigation Committee
  - Response of the student to the allegation and the outcome of investigation
  - Summary and conclusion of facts on both sides
  - Pronouncement of the adjudication.
- Possible outcome of the adjudication
  - the medical student is fit for medical practice and recommend that he/she may continue on the course with no conditions.

- there are grounds for concern as to the fitness of the medical student for medical practice but he or she may continue his or her course of study under specified conditions.
- the medical student is unfit for medical practice with recommendations that may include:
  - suspension from studies
  - dismissal from University
  - informing law enforcement agencies
  - informing concerned professional licensing bodies
- The Chairperson of Committee on Fitness to Practice shall communicate the decision of the Committee in writing to the medical student and the Dean.

# 25.4.4. Appeal

- A medical student shall have the right of appeal against a decision of the Committee on Fitness to Practice.
- The appeal shall be submitted in writing within twenty-eight consecutive days of the notification of the result of the decision to the Dean stating the grounds of appeal.
- The Dean will raise the ad hoc Dispute Resolution Committee to consider the appeal.
- During the consideration of the appeal, the decision of the Committee on Fitness to Practice shall remain in force.
- An Appeal hearing shall be arranged within one week of receiving the appeal in accordance with the following procedure:
- The medical 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

- The Chairperson of ad hoc Dispute Resolution Committee shall summarize
- 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 medical 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 bodies involved considers that the medical student may have committed a legal offence, the Chairperson shall suspend proceedings and refer the circumstances to the Dean.

# 25.5. Procedures for dealing with a medical student's serious illness or disability likely to affect fitness to practice medicine.

- Any member of the MBRU Community who has information, knowledge, or concern about any medical student's illness or disability likely to affect their fitness to practice medicine, has a responsibility to report to Dean.
- Medical students have a responsibility to report any illness or disability likely to affect their fitness to practice medicine to the Dean.
- The following procedures shall be followed for medical students whose health is considered to make them unfit for medical practice.
- The case shall be referred to the Chairperson of the Committee on Fitness to Practice.
- The Committee shall appoint a sub-committee of three of its members (with the option to co-opt experts as needed) to investigate the medical student's fitness to practice based on his/her health or disability and report to the full Committee.
- The Committee shall make a decision based on the findings of the subcommittee and shall communicate the decision in writing to the Dean.
- The Dean shall inform the student of the Committee recommendations.

- A medical 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.