



UQUMED

Year-6 Study Guide

College of Medicine

Umm Al Qura University

2021-2022



This UQUMED year-6 curriculum study guide was developed by the
College of Medicine, Umm AlQura University

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Program Overview

The following domains are the overall outcomes of the UQUMED MBBS program to be fulfilled by the graduates of the six-year program:

Knowledge and Understanding:

- Integrate basic, clinical, behavioral, and/or social sciences in medical practice.
- Advocate health promotion and disease prevention.
- Recognize cultural diversity and identify any possible cultural biases in healthcare.

Skills:

- Use clinical reasoning, decision making, and problem-solving skills in medical practice.
- Demonstrate the essential clinical skills.
- Manage patients with life-threatening medical conditions.
- Formulate and implement appropriate management plans for patients with common and important medical problems.
- Contribute effectively to the challenge of pilgrims' welfare during Hajj and Umrah seasons.
- Effectively communicate verbally and in writing with patients, their families, colleagues, and other health professionals.
- Practice teamwork and inter-professional collaboration.
- Critically appraise and demonstrate scholarly activities related to health sciences research.
- Demonstrate basic research skills.
- Apply medical informatics in healthcare system effectively.
- Practice evidence-based healthcare.

Values:

- Place patients' needs and safety at the center of the care process (Respect for patient dignity and autonomy, openness, truthfulness, caring, compassion).

- Adhere to the regulations and legal principles of Saudi healthcare system in the Kingdom (Social responsibility, accountability, teamwork, collegiality).
- Demonstrate professional attitudes, Islamic and ethical behaviors of physicians (Commitment, humility, integrity, honesty, reliability).

Demonstrate the capacity for self-reflection and professional development (Life-long learning, insight, evidence-based practice, ethical conduct).

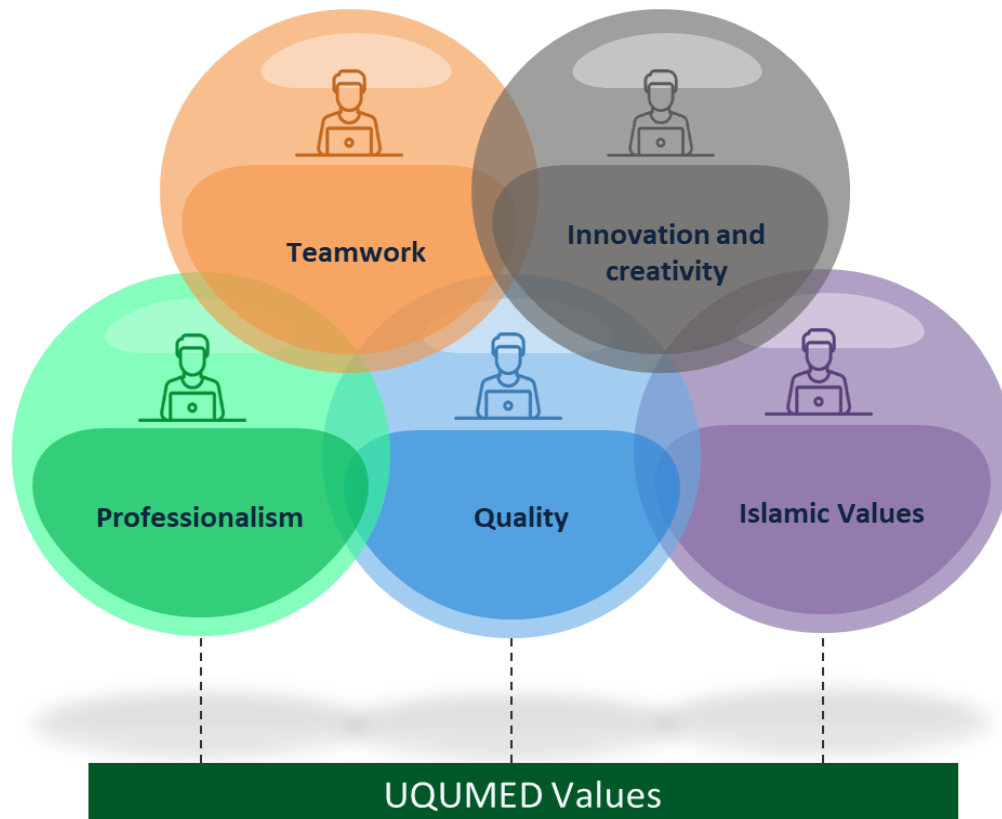
UQUMED Program Vision

To be one of the leading Medical Faculties in the Region in Medical Education, Research and Healthcare Promotion.

UQUMED Program Mission

Graduating Competent Physicians to provide high quality comprehensive Healthcare to the community and Pilgrims.

UQUMED Values



Year 6 (pre-internship)

Introduction

Year 6 is a pre-Internship phase of the program that focuses on clinical placements and clinical practice to prepare students to their role in the clinical team and healthcare system. Like the previous two years, workplace-based learning is main learning approach.

Almost all learning will take place in healthcare settings to ensure UQU medical students have exposure to patients with a wide range of healthcare needs and develop required competences.



This will be achieved in Year 6 through:

- An Introduction and Orientation session in the beginning of the year to introduce students to the structure of the year, learning opportunities, workplace-based learning, and evaluation of assessment opportunities
- Workplace-based learning horizontal modules; **Module A:** Musculoskeletal Health; **Module B:** Emergencies and Trauma; **Module C:** Special Senses, and **Module D:** Pre-internship placement
- Vertical modules that build on learning in previous years
- Maintenance of a portfolio and practical procedures checklist
- Written and practical summative assessments: both mid-year and end of the year comprehensive exams

Pre-requisite

Students are eligible to study Year 6, after successful completion of the Year 5.

Aims

Year 6 is designed to:

- Develop students' understanding of the integrated approach to diagnosing and managing patients' problems
- Develop students' understanding of the healthcare system and how patients access care
- Prepare senior students to become competent, effective interns
- Develop students' understanding of the value of inter-professional practice

Learning Outcomes

By the end of Year 6, students will be able to:

- Manage common medical emergencies
- Utilize their basic sciences knowledge to understand the pathophysiology and presentations of common diseases
- Demonstrate a wide range of clinical skills used in practice and be able to carry out basic practical procedures competently
- Utilize the information gathered from patients, together with a developing an understanding of medicine, to produce a differential diagnosis and problem list as well as to develop a general management
- Communicate effectively with patients and healthcare workers
- Develop skills as a workplace learner, who is able to make the most of experiential learning opportunities
- Demonstrate understanding of, and contribute effectively to, the challenges of pilgrims' welfare and any emergency presenting during Hajj and Umrah seasons
- Demonstrate an understanding of cultural diversity, and recognize any possible cultural biases in healthcare
- Construct appropriate evidence-based management strategies
- Advocate health promotion and disease prevention
- Recognize the roles of various healthcare professionals involved in patient's care
- Apply the theories and principles that govern ethical decision making to major ethical dilemma in medicine
- Develop and maintain life-long learning skills
- Reflect on their own competency and design a remedy plan
- Demonstrate and appreciate the role of self-reflection and peer assessment in maintaining quality healthcare
- Recognize the principles of amelioration of suffering and disability, rehabilitation and palliative care, including appropriate pain management
- Make decisions in partnership with patients and/or their carers
- Deal with the aftermath of errors, with both doctors and patients

Structure of the year:

The year begins with a general introduction and orientation session to Year 6, including information concerning the in-course and end of year assessments. Students will then complete the following horizontal modules over the course of the year:

- **Module A:** Musculoskeletal Health (Rheumatology and Orthopedics),
Module A of year 6 is a 4-week module. It focuses mainly on the integration between rheumatology and orthopedics to cover the medical and surgical aspects of joints,

bones and connective tissue diseases. The vertical modules teaching are linked, where possible, to this horizontal module teaching that takes place.

- **Module B: Emergencies and Trauma (Medical and Surgical Emergencies);**
Module B of Year 6 is a 6-week module, which focuses on the most common surgical and medical emergencies in the community that present to the Emergency Department. Most of the learning takes place in the healthcare workplace: Emergency Department, Operation Room, Intensive Care Unit, and Inpatients Ward. Structured tasks and a portfolio are required to be completed within the module, including following a patient from the Emergency Department on his/her clinical pathway and writing a comprehensive report.
- **Module C: Special Senses (Ophthalmology and Otolaryngology)**
Module C: Special Senses is a six-week module. The main focus will be on clinical presentations related to Ophthalmology and Otolaryngology. Otorhinolaryngology and Ophthalmology are important specialties of medical practices, which required basic competence levels in graduate doctors to manage basic otorhinolaryngology, head and neck, and eye related diseases. This course develops students basic Otorhinolaryngology and Ophthalmology, clinical knowledge and skills, how to recognize and manage related clinical complications and when and how to seek specialized advice when it is needed.
Like previous modules in Year 4-6, workplace-based learning is the backbone of this module. Students spend clinical attachments in Outpatients' Clinics, Operating Room, Wards, and Primary Healthcare Centers. The vertical modules teaching is linked, where possible, to this horizontal module teaching that takes place
- **Module D: Pre-Internship**
This is a ten weeks' clinical placement-based module designed to prepare senior students to be competent interns and to fulfil their role within the medical team effectively. In this module students will be placed in clinical rotations in a range of different hospitals and across different specialities. These will include the six major domains of internship in KSA: Internal Medicine, General Surgery, Primary Care Centres, Emergency Departments, Obstetrics and Gynaecology, and Paediatrics.

Students are required to shadow residents, consultants and/or interns working in these workplace-learning environments, and to practice being part of the medical team. Structured portfolio tasks will be used to maximise the learning in these opportunity-rich environments. Students will be evaluated during the attachment using a work-based assessment approach, which will be included in the Portfolio.

Contents and Teaching Methodologies

During the Pre-internship module, students are expected to rotate through:

Departments	No. of Weeks
General Internal Medicine 1	2
General Surgery 1	2
Emergency	2
Obstetrics and Gynaecology	1
Paediatrics	1
Primary Healthcare Centers	1

Within the clinical placements the following learning opportunities are available and students asked to participate effectively in:

- Regular consultant teaching, usually on ward rounds
- Attending standard teaching happening in the hospitals for residents
 - Morning reports
 - Noon round.
 - Academic half-days activities for residents: lectures, case-based teaching, critical appraisal of medical literature topics
 - Journal club (a monthly session for residents)
 - Grand rounds for the department (a weekly event for each department).
 - Attending outpatient clinics
- Prescribing skills conducted by clinical pharmacists
- A weekly seminar series on site

They will also be expected to learn from

- Work within the vertical modules: Case of the Month, Hajj projects, Hajj and Umrah placements,
 - Project work such as the Venous thrombo-embolism project (VTE) or any other creative projects inside the hospital to improve patients care and safety
 - Independent study
 - Case of the week
- **Two Selective Modules:** Selective 2 and Selective 3 Modules
 Selective module introduces students to modern aspects of treatment, research, innovation and non-conventional methodology in medicine. These modules allow students to pursue in-depth an area of medicine that is of interest to them. The selective course will be selected by the students based on their learning needs, interests, career plans or desire to explore in more depth one of the provided subjects. The selective courses may be delivered by more than one staff member whenever it required.

In Year 6, students take two selective Courses: Selective II and Selective III: selective course II is 2 weeks' duration. A wide range of selective courses are

available including elective clerkships, medical subspecialties, and research opportunities. These selective modules are immersive experiences; designed to give students exposure to specialties or practice outside of the core clinical curriculum early enough to help students with career decisions.

Alongside these horizontal modules, students also continue to address the Vertical modules that began in year 2 and are ongoing throughout year 6. Vertical modules teaching takes place throughout the year and teaching is integrated with the activities in the horizontal modules.

Learning outcomes for the Year 6 vertical modules:

I. Hajj and Umrah

By completing the Hajj and Umrah VM in Year 6, students will be able to:

- Participate in the pilgrims and underserved minority groups' welfare as a health advocate: developing health promotion projects, educational materials, or fieldwork (for example, participating in Hajj campaign, Haram rescuers program, research activities during Hajj and Umrah)

Note: by the end of Year 6, each student must **complete** at least one further fieldwork attachment during Hajj and Umrah seasons, and 30-hours of community-based ordination activities for underserved minority groups or as Haram rescuer. Students should start completing these requirements from Year 5 to Year 6. They are considered essential requirements for completing Year 6 and to be eligible to sit for the final graduating exams in Year 6. These will be assessed using portfolio.

II. Research and Evidence

By completing the Research and Evidence VM in Year 6, students will be able to:

- Design and conduct research projects related to Hajj and Umrah and pilgrims' welfare
- Describe and comply with the principles of scientific writing for plagiarism
- Understand the process and challenge of scientific publication
- Compose a written research manuscript in any one of the following formats: original research paper, systematic review, review article, short communication and accepted research proposal from an accredited Institutional Review Board (IRB).

III: Anatomy and Imaging

By completing the Anatomy and Imaging VM in Year 6, students will be able to:

- Describe and illustrate essential imaging and anatomy related to medical and surgical emergencies, ear, nose and throat disorders and ophthalmology
- Understand the role of imaging in the management of life threatening conditions including acute trauma

IV: Pathological Sciences

By completing the Pathological Sciences VM in Year 6, students will be able to:

- Order and interpret appropriate investigations for life threatening conditions
- Understand the role of key laboratory findings (D-dimer and cardiac enzymes) in decision making in emergency situations
- Interpret laboratory findings obtained from body fluids in emergency conditions

V: Use of Medicine

By completing the Use of Medicine VM in Year 6, students will be able to:

- Prescribe appropriate antimicrobial agents for common infections in primary care setting
- Understand antibiotic resistance
- Describe and understand the use of common synthetic and biological disease modifying anti-rheumatic drugs (DMARDs)
- Understand the use of essential emergency medications: antidotes, vasopressors and drugs used to treat life-threatening conditions
- Demonstrate competency skills in writing correct and appropriate prescriptions
- Recognize the potential targeted therapies for future promising therapeutic intervention.

IV: Clinical and Practical Skills

By completing the Clinical and Practical Skills VM in Year 6, students will be able to:

- Produce appropriate written clinical communications, including patients records, referrals and medical reports
- Perform and interpret an arterial blood gas sample
- Perform and interpret a 12 lead electrocardiograph
- Perform eye and external auditory canal irrigation
- Insert an IV cannula and write up an infusion
- Perform visual acuity and field testing; fundoscopy; Otoscopy
- Perform suturing / applying dressings or steristrips.
- Take a sample for blood culture
- Write safe prescriptions; completing an inpatient drug chart
- Write a discharge summary
- Complete a death certificate
- Order common investigations
- Describe, through observation the common procedures of thoracentesis, paracentesis , LP
- Perform immediate assessment and treatment of the critically ill patient using the RRAPID approach

- Obtain BLS recertification and ACLS certification

VII: Professional Development

By completing the Professional Development VM in Year 6, students will be able to:

- Recognize threats to medial professionalism posed by conflict of interest
- Demonstrate the ability to prevent and resolve inter-professional team conflicts
- Accept and manage complains, criticism, conflict and change
- Give and accept constructive feedback
- Demonstrate the ability to manage one's own time and balance between professional and personal responsibilities
- Recognize the abuse of social media and other potential violations of professional practice
- Accept responsibility for actively education oneself and others using appropriate educational tools
- Construct a CV
- Keep a portfolio of required task and activities

VIII. Family Health

By completing the Family Health VM in Year 6, students will be able to:

- Emphasize patient-centered approach in clinical practice
- Follow national and/or international guidelines in management of common primary care presentations in Saudi Arabia
- Follow the pre-referral management for most common emergency problems
- Master clinical reasoning, management planning skills and specific problem solving abilities

Consolidation, Integration and Feedback (CIF):

The year will include four CIF sessions that will take place at the last week of the modules A, B, C and D. Some of the material during these weeks will be based around case studies and lecture theatre sessions will be interactive in nature. The four CIF sessions have been designed to allow:

- Revision and consolidation of key facts and concepts from the preceding module(s)
- Integration of learning during the preceding module with other horizontal modules and/or related vertical modules
- Opportunities for formative assessment of learning in the preceding module(s)
- Feedback relating to assessment and progress



Assessment

Assessment and progression

The UQU Med MBBS program is annual system. There is summative and formative evaluation of students' progress.

Formative assessments

- Compulsory in-course formative assessments will be held at the end of each horizontal module (A, B, C, and D). The objective of these assessments is to provide students with feedback about their learning.
- In Year 5 formative assessments will include Multiple Choice, Single Best Answer Questions (MCQ-SBA) and written paper requiring an understanding of concept and interpretation of data
- Students progress and development in completing portfolio is also evaluated formatively by the end of each module
- Students are invited to discuss their performance in formative assessments with their personal tutor and the module teachers.

Summative assessment:

The learning outcomes of the modules will also be tested in the Mid-year and end of year comprehensive written and practical assessment. Also the Portfolio will be assessed summatively by the end of the year.

- Portfolio 30%
- Two mid-year comprehensive exams 10 %
- End of the year comprehensive (written and Practical/clinical exams) 60%
- Each student must also **complete** at least one-fieldwork attachments during Hajj and Umrah seasons, and 30-hours of community-based ordination activities for underserved minority groups or as Haram rescuer.

The blueprint of the content of the end of the year comprehensive written exams will include 60% of the four modules (A, B, C, and D) and 40 % Of the previous knowledge and skills of the MBBS program. It consists of:

- 200 Multiple Choice, Single Best Answer Questions (MCQ-SBA) that will be completed in 4-hours. This will be in the form of two exam paper in the same day each of 100-items and lasting for 120-minutes
- A practical/clinical exam will be conducted by the end of the year

Learning Resources

The following learning resources are the general references for each subject, however, may some leaning sessions have otherwise specific reference, the resources will be clearly stated.

<p>Research and Evidence</p>	<p><u>Recommended References:</u></p> <p>1-Epidemiology: An Introduction Publication Date: June 4, 2012 ISBN-10: 0199754551 ISBN-13: 978-0199754557 Edition: 2</p> <p>2-Epidemiology, Biostatistics and Preventive Medicine Publication Date: May 21, 2007 ISBN-10: 141603496X ISBN-13: 978-1416034964 Edition: 3</p> <p>3-Maxey-Rosenau-Last Public Health and Preventive Medicine: Fifteenth Edition Publication Date: September 21, 2007 ISBN-10: 0071441980 ISBN-13: 978-0071441988 Edition: 15</p> <p>4-Introduction To Public Health Publication Date: April 21, 2010 ISBN-10: 0763763810 ISBN-13: 978-0763763817 Edition: 3</p>
<p>Professional Development</p>	<p><u>Recommended References:</u></p> <p>1. Doing Right: A Practical Guide to Ethics for Medical Trainees and Physicians. By Philip C. Hebert. Oxford</p> <p>2. Medical Ethics and Law: by Tony Hope and Julian Savulescu. Churchill Livingstone, Elsevier</p> <p>3. How to Succeed at Medical School: An Essential Guide to Learning. Dason Evans, Jo Brown. Wiley, BMJbooks 2015.</p> <p>4. Communication Skills for Medicine. By Margaret Lloyd, Robert Bor Churchill Livingstone, Elsevier</p>
<p>Clinical Skills</p>	<p><u>Recommended References:</u></p> <p>1. Clinical Examination, 8th Edition A Systematic Guide to Physical Diagnosis by Nicholas J. Talley and Simon O'Connor</p> <p>2. Browse's Introduction to the Symptoms & Signs of Surgical Disease, 5th edition, 2015</p> <p>3. Skills for Communicating with Patients, 3rd Edition by Jonathan Silverman, Suzanne Kurtz, Juliet Drape</p> <p>4. Practical Guidelines for Infection Control in Health Care Facilities, World Health Organization. http://www.wpro.who.int/publications/docs/practical_guidelines_infection_control.pdf</p>
<p>Year6 Electronic References</p>	<p>1. UpToDate, through the UQU library database</p> <p>2. Medscape eMedicine</p> <p>3. BMJ Best Practice</p>

