# **UQUMED**MBBS Program

Year 3 Study Guide





**UQUMED** Academic Year (2019-2018)-(1440-1439)



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### **Table of Contents**

Important contact :	6
Administrative structure of Year 3	7
General Introduction of UQU MED Reformed MBBS Curriculum	9
General Learning Outcomes of the Program	9
General Structure and Outline of the Program:	11
Year 3: Fundamentals of Clinical Science-2	12
Introduction	12
Structure of Year 3	13
Methods of Teaching and Learning	15
Clinical exposure:	15
Consolidation, Integration and Feedback (CIF) Week:	15
Assessment	16
Vertical Modules (VM)	17
VM Teaching methodologies:	17
VM Assessment:	17
Learning Resources:	18
Timetable	19



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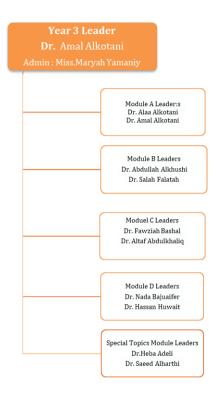
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### Administrative structure of Year 3













### General Introduction of UQU MED Reformed MBBS Curriculum

The mission of the UQUMED MBBS program is "to provide medical education of the highest quality according the national and international standards to foster the development of doctors who are able to meet and respond to the health needs and expectation of the Makkah and Saudi Community, and will be well prepared to enter postgraduate training to expand their competencies.

The reformed MBBS curriculum starts in September 2016 to fulfil the following principles:

To develop a student-centred curriculum

To develop an integrated curriculum; both in terms of content and learning experiences

To develop a spiral curriculum; that builds on prior learning To develop a clinical-oriented curriculum; with a focus on the practice of medicine in all learning activities and early clinical exposure

To ensure that graduates are scientifically literate

To ensure that graduates fulfil the Saudi MED competencies

To develop an assessment for learning approach

### **General Learning Outcomes of the Program**

The learning outcomes for the UQUMED Program of Bachelor of Medicine and Surgery "MBBS" are designed to fulfil the Saudi Medical Education Directives Framework "Saudi MEDs", which is approved by the Deanery of Medical Colleges and the Ministry of Education date January 2015.

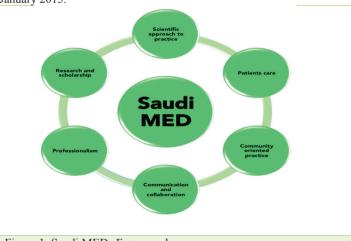


Figure 1: Saudi MEDs Framework



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

### **Domain 1: Scientific Approach to Practice**

- Demonstrate a genuine understanding of, and an ability to integrate, the basic, clinical, behavioral and social sciences in medical practice
- Assess evidence critically to deliver evidence-based health care
- Consider how knowledge of disease pathology is applied in care and prevention

### Domain II: Patient care

- 1. Demonstrate competence in a range of core clinical and practical skills essential for patient care
- 2. Demonstrate clinical reasoning, decision making, and problem solving skills
- 3. Diagnose and mange, under supervision, a range of lifethreatening medical conditions
- 4. Diagnose and mange, under supervision, a range of common clinical problems
- 5. Employ a patient-centered approach of practice
- 6. Be able to assess patients' healthcare needs, taking into account their physical and mental health and personal and social circumstances, and apply their knowledge and skills to synthesize information from a variety of sources in order to reach the best available diagnosis and understanding of the patient's problem

### **Domain III: Community oriented practice**

- 7. Demonstrate understanding of the healthcare system in Saudi Arabia
- 8. Advocate for, and contribute to, health promotion and disease prevention
- Demonstrate and understanding of, and contribute effectively to, the challenge of pilgrims' welfare during Hajj and Umrah seasons

### **Domain IV: Communication and Collaboration**

- Effectively communicate with patients, colleagues, and other health professionals
- 11. Appreciate, and act effectively in, teamwork and interprofessional collaboration
- 12. Apply an understanding of basic medical informatics in healthcare systems
- 13. Demonstrate an understanding of cultural diversity, and recognize any possible cultural biases in healthcare

### **Domain V: Professionalism**

- 14. Adhere to the professional attitudes and behaviors expected of physicians
- 15. Comply with the Islamic, legal, and ethical principles of professional practice



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 Be prepared to undertake personal and professional development

### Domain VI: Research and scholarship

- 17. Demonstrate competence in basic research skills
- Demonstrates a commitment to scholarly pursuits and continuing professional activity

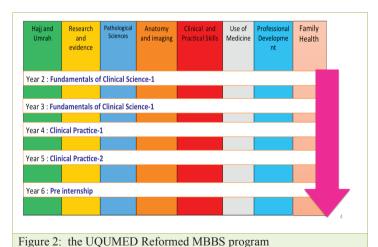
### **General Structure and Outline of the Program:**

UQUMED reformed MBBS is a six-year annual program, in addition to an internship year. The program consists of three phases

- Phase I: the Preparatory foundation (Year1)
- Phase II: the integrated clinical sciences and practice (Year 2-6)
- Phase III: the internship (Year 7)

The second phase of the MBBS program (integrated clinical sciences and practice phase) provides opportunities for students to develop competencies consistent with the *Saudi MED* competence-based framework via an integrated curriculum that encompasses both horizontal modules and longitudinal 'vertical' modules within a five-year learning program.

Each year of this phase consists of a number of multi-disciplinary horizontal modules that are delivered collaboratively by multiple academic departments within the Faculty of Medicine. In addition, there are eight vertical modules that run along the five-year program, from year-2 to year-6.





### Year 3: Fundamentals of Clinical Science-2

### Introduction

Like year 2, year 3 is delivered as a series of sequential, integrated, systems-based modules. Each module is based around a physiological system, provides integrated teaching across disciplines, is integrated with the learning within the vertical modules, and is designed to build on knowledge and skills learnt in previous modules.

The two years (Years 2 and 3) make up the Fundamentals of Clinical Science phase of the program, to provide an underpinning learning experience in basic clinical sciences and the foundations of learning in the vertical themes that run through all years of the curriculum.

### The aim of the Fundamentals of Clinical Science level is to enable students to:

- Gain a firm understanding of the scientific knowledge and principles that are relevant to, and essential for, excellence in clinical practice
- Develop an understanding of science in the context of its application to clinical medicine, organized according to physiological and functional systems (e.g., Circulation and Breathing), rather than by academic disciplines (e.g., physiology, biochemistry and anatomy)
- Recognize the application of science to medicine and have the skills to appreciate methods of scientific research, thereby enabling students to appreciate and understand future advances in medicine.
- Develop the key skills required for data collection and analysis, information retrieval and use of electronic databases, problem solving, report writing and presentation of information and case reports.
- Have opportunities to develop an appreciation of the ethical, social and legal dimensions of medicine
- Have an opportunity for early patient contact and start to develop the foundations of the professional skills required for good patient care
- Start to develop an understanding of the value of health education, preventive medicine and the natural history of disease
- Demonstrate understanding of challenge of pilgrims' welfare and have opportunity to contribute to pilgrims' welfare
- Develop an understanding of the Islamic Culture and apply its principles in todays' life
- Gain a good foundation for learning in the later years of the program





### The Fundamentals of Clinical Science level will be achieved in Year 3 through:

- A brief Introduction and Orientation session of the first week of Year 3. Students will be introduced to the structure of Year 3 and all required activities, assessment and evaluation measures.
- Systems-based learning in horizontal modules: Neuroscience and Behavior, Movement and Musculoskeletal, Endocrine Systems and Reproduction, Genetics, Development and Cancer modules
- Vertical modules that build on vertical module learning in year 3, are ongoing throughout the year and extend into the later years of the program
- A Selective module "Special Topics I" that provides students with the opportunity to broaden their intellectual experiences with their choice of a set of Special topics
- Continue the early clinical exposures with a structural learning opportunities in the Primary HealthCare Centers (PHC) and hospitals
- Regular opportunities for formative assessment and feedback
- Maintenance of a portfolio and practical procedures checklist
- Written and practical summative assessments: mid of the year and end of the year comprehensive assessments

### Structure of Year 3

The year begins with general introduction and orientation session to Year 3, 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:

Neurosciences and Behavior (Module A) Movement and Musculoskeletal (Module B) Selective course "Special Topics I" Endocrine system and Reproduction (Module C) Genetics, Development and Cancer (Module D)

The Selective I module allows students to understand a medically-related topic in more depth. Examples include: how to utilize the basic concept of pathological sciences; employing research techniques in order to find possible solutions to common health problems in Saudi Arabian community and the world; understanding multi-disciplinary team working; enhancing the creativity in solving problems.

General University required subjects including Islamic Culture, Holy Qur'an, are also taught throughout Year 3. Students will also continue to complete the vertical modules, which are studied throughout Phase II of the MBBS program from Year 2 to Year 6.

The Horizontal Modules include the following:





- Neuroscience and Behaviour module is 7-week-module, taught during the first semester
- Movement and Musculoskeletal module is 7-week-module, taught during the first semester
- Endocrine Systems and Reproduction module is 7-week module, taught during the second semester
- Genetics, Development, and Cancer module is 5-week-module, taught during the second semester

### The Vertical Modules include the following:

- 1. Hajj and Umrah
- 2. Research and Evidence
- 3. Anatomy and Imaging
- 4. Pathological Sciences
- 5. Use of Medicine
- Clinical skills
- 7. Professional Development
- 8. Family Health



### **Methods of Teaching and Learning**

The program aims to adopt student-centred leaning approaches and uses many interactive learning strategies in addition to the interactive lectures.

In Year 3 of the MBBS program, students are exposed to various learning approaches that include large and small group teaching. Students are expected to be involved effectively in the learning process.

Students' learning opportunities;

- Lectures
- Case-Based Learning (CBL) and Task-Based Learning (TBL)
- Flipped-classes
- Tutorials and workshops
- Structural clinical attachment
   Self-paced learning tasks and directed self-learning

How could you be involved effectively in your learning?

### **Clinical exposure:**

The reformed MBBS is mainly focusing on the early clinical exposure and patient-centre practice. Thus from Year 3 of the program, students will continue developing their exposure to different healthcare facilities. They also will be introduced to the first time to the clinical care in the Primary HealthCare Centres.

Year 3 clinical exposures consists of the following

- Three sessions of structural clinical attachment to Primary HealthCare Centres
- Simulated Diabetic Care Day
- Simulated Clinical skills sessions

There will be a written task and evaluation form to be completed by then end of each clinical attachment and compiled in student's portfolio

### Consolidation, Integration and Feedback (CIF) Week:

The Year 3 curriculum will include four CIF weeks that will take place at the end of the integrated modules. Some of the material during these weeks will be based around case studies or discussion. The four CIF weeks 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), and for following up their performance of



portfolio

- Feedback relating to assessment and progress
- Students also present their leaning projects, which are related to one of the related vertical themes. By the end of Year 3, each student will participate within group of 4-6 students in delivering or presenting three leaning projects.

### **Assessment**

The nature of the reformed UQUMed MBBS curriculum in phase 2 (years 2-6) is an annual system. Successful completion of in-year and end of year exams, and compulsory course requirements is essential to allow progression to the next year of study. Since the curriculum is integrated vertically and horizontally, exams are integrated as well.

The assessment system is consisted of formative and summative evaluation of students' progress.

Formative assessment has no assigned marks. By the end of each block there will be compulsory in-course formative assessments. The objectives of these assessments are both to stimulate efficient learning and to provide students with the opportunity to experience assessments under examination conditions.

Summative assessment in Year 3 consists of the following:

Portfolio	15%
Summative Assessment 1 & 2	10%
(Module A&B)& (Module C&D)	
Final Comprehensive	75%

### The Purpose of...

### assessment is to INCREASE quality.



### evaluation is to JUDGE quality.

#### Too short and not enough leaves. C-





"A portfolio is a collection of a student's work, which provides evidence of the achievement of knowledge, skills, appropriate attitudes and professional growth through a process of self- reflection over a period of time"

Davis et al 2009



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### **Vertical Modules (VM)**

The UQUMED is introducing new and exciting learning experiences through the concept of VM.

There are eight-integrated vertical modules in phase II of the MBBS curriculum. These are:

- 1. Hajj and Umrah
- 2. Research and Evidence
- 3. Family Health
- 4. Anatomy and Imaging
- 5. Pathological Sciences
- 6. Use of Medicine
- 7. Clinical Skills
- 8. Professional Development

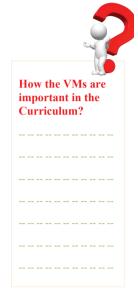
### VM Teaching methodologies:

The majority of VMs sessions are delivered in small group format:

- Small Group discussion or workshops
- · Practical sessions
- Computer-assessed learning.
- Self-direct learning (SDL) materials.
- Clinical skills tutorials
- Haji Camp

### **VM Assessment:**

The teaching and assessment of these vertical modules are integrated within the horizontal modules. This module will be assessed in the structure of the year assessment in form of MCQs, OSCEs, practical, and portfolio tasks.





### **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.

Subjects	References
physiology	Aging Mechanisms: Longevity, Metabolism and Brain Aging, Nozomu M. And Inhee M., Springer, Book, 2015
Anatomy, Embryology,	Clinical Anatomy By Regions Or By System, By Richard S. SNELL, 9th Edition
and Histology	Snell, Clinical Neuroanatomy, 7th Ed
	Martin. Neuroanatomy Text And Atlas, 4th Ed
	Wheater's Functional Histology: A Text And Colour Atlas, By Young, B.; Lowe, J. S.; Stevens, A. And Heath, J. W, 6th Editions
Genetics	Emery's Elements Of Medical Genetics - Peter D. Turnpenny, Sian Ellard, Alan E. H. Emery, 2014
Hematology and Immunology	Essential Of Clinical Immunology By Helen Chapel, Mansel Haeney, Siraj Misbah And Neil Snowden. 6th Edition, Chapter 17, PP; 318-320, Chapter 10, PP; 197-201 And Chapter 10, PP; 206- 211
	Hoffbrand's Essential Hematology Seventh Edition (2016) Page 81-86
	Sadler TW. Langman's Medical Embryology 13th Ed. 2010: Lippincott.
Medicine	Essential Endocrinology And Diabetes (6th Revised Edition) Holt RIG And Hanley NA (2012) Wiley-Blackwell
	<ul> <li>Primer On The Rheumatic Diseases, By John H. Kllippel, John H. Stone, Leslie J. Crofford. 13th Edition. Chapter 6, PP;114-140, Chapter 11, PP; 224-240, And Chapter 30, PP; 303-360</li> </ul>
	<ul> <li>Human Virology. A Text For Students Of Medicine, Dentistry, And Microbiology, By: Leslie Collier &amp; John Oxford And Paul Kellam, 4th Edition, Chapter 6, Viruses And Cancer In Humans</li> </ul>
	Kumar And Clarks Clinical Medicine, 8th Edition 2012.
Pathology	Robbins Pathological Basis Of Diseases By Vinay Kumar Et All., 9th Edition, Saunders Ltd
Pharmacology	Basic And Clinical Pharmacology (Katzung & Trevor) , 13th Edition.     Lippincott's Illustrated Reviews: Pharmacology, 2015, 6th Edition.



# Do I need to buy all these books?

"Certainly you don't need to buy all these books... only choose the most recommended textbooks. The rest are recommended references

The College Library has most of these recommended textbooks.

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Biochemistry	Textbook:  Clinical Chemistry: A Laboratory Perspectives, 1st Edition By Wendy Arnesin, Jean Brickell  Textbook Of Biochemistry With Clinical Correlations, Thomas M. Devlin 7th Edition (2010), Wiley E-Text ISBN: 978-0-470-60976-Reference Book:  Illustrated Clinical Biochemistry, 5th Edition By Allan Gaw, Michael J. Murphy, Rajeev Srivastava, Robert A. Cowan, And		
Family Health	Denis St. J. O'Reilly.  Recommended book:		
3rd year	Talley NJ,O'Connor S. Clinical examination:a sysrematic guide to		
J	physical		

### Timetable:

The below timetable is the master plan of the whole Year 3, showing the beginning and the end of each semester and module, the dates of the scheduled holidays and exams among the academic year, and the names of the four proposed modules of Year 3 and their enclosed themes.







	Third year Calend	dar (The First Term (18/19	<b>)</b> ))
Week No.	Date	Module	Themes
	2/9/18	Introductory Days	
1	22/12/39 4/9/18		Theme 1: Seizure
	24/12/39		Theme 2:
2	9/9/18 29/12/39		Weakness
3	16/9/18 6/1/40		Theme 3: Diplopia
	23/9/18		Біріоріа
	13/1/40 24/9/18	Module A:	National Day
4	14/1/40	Neurosciences and	Theme 4: Tremor
	24/9/18 14/1/40	Behaviour	Theme 4: Tremor
5	30/9/18 20/1/40		Theme 5: Numbness
6	7/10/18		Theme 6: hearing
	27/1/40 14/10/18		loss Theme 7:Memory
7	5/2/40		loss Formative
,	17/10/18 8/1/40		Assessment Exam
			A
8	21/10/18		Theme 1: Soft
0	12/2/40		tissue disorders Theme 2:
9	28/10/18		Shoulder Region
	19/2/40		& Brachial Plexus (Shoulder pain)
10	4/11/18 26/3/40		Theme 3: UPPER LIMB TRAUMA
44	11/11/18		Theme 4: BACK
11	3/3/40	Module B:	& THIGH (BACK PAIN)
12		Movement and	Theme 5: LEGS, ANKLES &
	18/11/18 10/3/40	Musculoskeletal	FOOT (FOOT AND ANKLE
			PAIN)
12	25/11/18		Theme 6: THEME:
13	17/3/40		RHEUMATOID ARTHRITIS
	0/10/20		Theme 7:
	2/12/18 24/3/40		OSTEOPROSIS AND VITAMIN
14			D DEFICIENCY Formative
	5/12/18 27/3/40		Assessment Exam
			В
16	24/12/18	Module A & Module B	CIF Week for
10	17/4/40		Module A and B
17	16/12/18 9/4/40	Feedback session for Self-Paced R	
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18	23/12/18 16/4/40	Summative Exam (Module A&B)
19	30/12/18 23/4/40	Mid-Year Holiday

The Second Term			
	Date	Module	Themes
1 2	6/1/19 30/4/40 13/1/19 7/5/40	Special Topics Module	
3	20/1/19 14/5/40		Theme 1: General Principles of Endocrinolo gy & Neuroendoc rinology
4	27/1/19 <b>21/5/40</b>		Theme 2: Growth function of growth and thyroid hormones
	28/1	Module C:	MOCK OSCE
5	3/2/19 28/5/40	Endocrine and Reproductive Systems	Theme 3: Growth function of adrenal hormone
6	10/2/19 5/6/40		Theme 4: Control of energy metabolism
7	17/2/19 12/6/40		Theme 5: Control of calcium haemostasis
8	24/2/19 19/6/40		Theme 6: male and female reproductive endocrinolo gy
9	3/3/19 26/6/40		Theme 7: clinical cases of abnormal





			endocrine	
			hormone	
			secretion	
	10/3/19		Theme 1:	
10	3/7/40		The Human	
	<i>C</i> , , , , ,		Genetics	
	17/3/19		Theme 2:	
	10/7/40		Cell Biology	
11			of Cancer	
	19/3/19	Module D:	Big Hall	
	5/7/40		Meeting	
		Genetics, Development,	Theme 3	
4.0	24/3/19	and Cancer	Haematologi	
12	17/7/40		cal	
			Malignancie	
			S Theme 4:	
	31/3/19		Cancer	
13	24/7/40		Therapy	
13			Formative	
	04/04/19		Exam D	
			CIF Week	
14	7/4/19	Module C & Module D	for module	
	2/8/40		C & D	
	14/4/19			
15	9/8/40	Self-Paced Revision		
	17/4/19	Summative Exam (Module C and D)		
	21/4/19	Self-Paced Revis	sion	
	16/8/40			
16	21/4/19	Final Comprehensive O	nsive OSCE Exam	
		Final Comprehensive S	POT Evam	
	23/4/19	That Completed sive 5	. O 2 Daum	
17	28/4/19	Final Exams		
	23/8/40	Final Exams  Final Comprehensive exam		
	1/5/19			
	15/5/18	End of the 2 <sup>nd t</sup> to	erm	
	13/3/10	End of the 2	C1 1111	

