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ARABIAN GULF UNIVERSITY



COLLEGE OF MEDICINE AND MEDICAL SCIENCES



1997 Prospectus



CENTRE FOR ARAB GULF STUDIES
UNIVERSITY OF EXETER 30 JUL 2000



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ARABIAN GULF UNIVERSITY ORGANIZATION AND ADMINISTRATION

General Conference

This is the highest authority and decision making body in the University. It is made up of the Ministers of Education of the G.C.C. countries.

Board of Trustees

It is made up of representatives of the six sponsoring countries, the President of the University, Executive of the Arab Bureau of Education for the Gulf States, and three appointed experts in higher education.

The President



University President
Dr. Abdulla Al-Refai, MD

The President who is appointed by the General Council of Ministers is the Executive Officer of the University and is assisted by the Vice President.



University Vice President
Prof. Riyad Hamzah, PhD

The University Council

This is made up of :

The President of the Arabian Gulf University
The Vice President
Dean, College of Medicine and Medical Sciences
Dean, College of Graduate Studies

Dr. Abdulla Al-Refai
Prof. Riyad Hamzah
Prof. George M. Abouna
Prof. Mohammed Al-Ansari

One representative from each of the two Colleges

Introduction from the Office of the Dean:

Prof. George M. Abouna
MD, MS, FRCS, FRCSE, FACS, FICS, FRSM



The Arabian Gulf University and the College of Medicine & Medical Sciences were established by a Decree of the General Council of Ministers of Education of the GCC Countries at their 5th Meeting in Kuwait on 30 March 1980. The first batch of 37 students were admitted to the Pre-Medical Programme of the College in October 1982. The Medical Programme began 2 years later in 1984 and extended over a period of 5 years and the first class graduated in 1989. Thus the study period at the College of Medicine & Medical Sciences until recently was 7 years. Since its beginning the College has been admitting 30-70 students annually from the GCC member countries according to an agreed allocation formula. Currently the total number of registered students at the College of Medicine & Medical Sciences at the beginning of the academic year 1996-97 is 372 in all the 7 years. The College of Medicine & Medical Sciences of AGU is a unique institution amongst the 8 Colleges of Medicine in the Arabian Gulf, in that it follows the latest and most current system of medical education: The Integrated, Community Oriented, Problem Based, Learner Directed Learning. In this system of education, teaching and learning are not carried out by lectures designed and given by individual departments, but through an integrated and body-system based problem solving process carried out by the students, in small groups, with the faculty members acting as facilitators, advisors and resource

personnel. This new system of medical education, which is currently being adopted by an increasing number of Medical Colleges throughout the world, has been found to be more successful in equipping the medical graduate with the desired knowledge, the appropriate attitudes and professional skills which are necessary for the effective and successful practice of medicine in the community. While this modern concept of medical education is the most desirable, it does require for its successful implementation, adequate number of experienced full-time academic faculty, as well as the clinical facilities of a University Teaching Hospital which is run and administered by the University in order to meet its basic educational goals and objectives as is currently available to other Medical Colleges in the Arabian Gulf Region as well as in the rest of the world. Unfortunately the College of Medicine & Medical Sciences of AGU has continued to suffer from an acute shortage of full-time academic faculty and the non-existence of a University Teaching Hospital. Since 1995, in an attempt to improve the educational process and to bring it in line with current developments and advances in medical education, several important changes were recently introduced. These are:
 A more effective and organised system of administration and governance within the College by the appointment of 6 Vice Deans.

The establishment of some 10 academic departments with the appointment of senior and experienced academicians as chairpersons.

The shortening of the study period in the Medical College from 7 to 6 years by appropriate reorganisation of the existing medical curriculum.

The introduction of a revised process of student evaluation throughout the study period and particularly as it affects the qualifying examination for the B.Sc. and the MD Degrees by improving the reliability, the predictiveness and cost effectiveness of the evaluation process.

The introduction of new admission criteria to the College of Medicine in order to improve the quality of entering candidates and reduce the high failure rate of graduates, by introducing a medical entrance examination, which was applied for the first time in the academic year 1996/97, that includes a written examination in biomedical sciences and in English language together with a structured interview of the student by a small committee of the faculty.

Greater participation of medical students in faculty Committees and in the systematic evaluation of faculty performance and of the curriculum.

These developments have substantially improved the effectiveness and the quality of medical education at the Medical College of AGU, as evidenced by student and faculty feedback, and the greatly improved success rate of the final MD examination from 76% in earlier years to 90% in 1996.

Nevertheless the College of Medicine & Medical Sciences of AGU continues to suffer from major shortages in full-time faculty and from the lack of a University Teaching Hospital both of which continue to make it very difficult for this College to fulfil its mission of providing high quality

medical education for its medical students and graduates. Although the number of full-time faculty was recently increased from 26 to 35, the ratio of student to faculty at this College remains the highest anywhere in the Gulf Region being 10 to 1 instead of the expected 4 to 1.

The current administration of the College has made proposals to the University and to the Board of Trustees for a substantial increase in the number of Full-Time faculty, for the establishment of a University Teaching Hospital under the direct administration of the University and for the setting up of an Ambulatory Clinical Teaching Unit within the premises of the College which will function as an out-patient facility for teaching and medical consultation by the full-time faculty of the College. It is very much hoped that these proposals will soon be implemented so that the college of Medicine of this University will be able to provide high quality medical education for its students and graduates for the 21st Century as well as establish centres of Medical Excellence for the care of the patients of Bahrain and the Gulf Region. When these essential facilities are made available, the College of Medicine and Medical Sciences of the Arabian Gulf University will then be better able to fulfil the dreams and aspirations of its founders, the Ministers of Education of the GCC Countries in their wise decision of 1980 to create this truly unique and jointly sponsored College of Medicine for the people of the Arabian Gulf Region.

Officers of the College of Medicine & Medical Sciences

Dean Prof. George M. Abouna

Vice Deans

Academic Affairs Prof. Hafiz El-Shazali

Undergraduate Education Prof. Hossam Hamdy

Research Prof. Vijay Mathur

Administration Dr. Khaldoon Al-Roomi

Student Affairs Dr. Khalid Tabbara

Primary Health Care Dr. Faisal A. Al-Nasir

Academic and Administrative Organisation:

The Governing Body of the College of Medicine is the College Council. Its function is the formation of major policies for the College of Medicine. The Head of the Faculty Administration is the Dean assisted by the Vice Deans and Chairmen of Departments. The faculty's officers are responsible to the Dean for carrying out the policy decisions of the life of the college.

The College Council, Departmental Councils and several committees are responsible for the running and supervision of different aspects of the academic life of the college.

- College Council
- Departmental Council
- Dean's Executive Committee
- Dean's Advisory Committee
- Education Committee
- Educational Resources Committee
- Medical Research Committee
- Admission Committee
- Promotions Committee

College Council

Terms of Reference

Subject to the laws and regulations of the Arabian Gulf University, the College Council shall have the following membership and functions:

- a) It shall be the policy making body in the College of Medicine.
- b) It shall approve and recommend to the University Council the educational, research and service programmes of the College of Medicine.
- c) It shall approve and recommend to the University Council all examination results which contribute marks towards the award of degrees.
- d) It shall make recommendations to the University Council for the award of degrees within the College of Medicine.
- e) It shall approve new developments within the College of Medicine and where necessary recommend these to the University Council.
- f) It shall approve and recommend to the University Council the annual budget of the College of Medicine.
- g) It shall recommend to the University Council specific procedures and regulations with regard to recruitment and promotion of faculty within the College of Medicine.
- h) It shall deal with any other matters referred to it by the University Council.

Membership

- | | | |
|----|---|------------|
| a) | Dean, College of Medicine | Chairman |
| | Vice Deans | Ex-officio |
| | Chairmen of Departments & Heads of Divisions | |
| | One Professor | Elected |
| | One Associate Professor | Elected |
| | One Assistant Professor | Elected |
| | Two Members from the public sector with interest in the affairs of the College | |
| | One representative of the Medical Students' Body | Invited |
| | College Secretary | Ex-officio |
| b) | Any other person with special knowledge or expertise may be invited to attend meetings of the Committee as appropriate. | |

COLLEGE AND DEPARTMENTAL COUNCILS

Departmental Council

Terms of Reference

- a) It shall serve as a forum for the discussion of all matters pertaining to education, research and service within the department.
- b) It shall prepare and recommend to the Dean the annual departmental report including academic activity, need for faculty and educational and research resources.
- c) It shall recommend the departmental budget to the Dean.
- d) It shall consider any other matters which may be referred to it by the Dean or College Council.

Membership

- a) All departmental Academic Staff.
- b) The Academic Chairman of the department shall be the Chairman of the Departmental Council.
- c) Any other person with special knowledge or expertise may be invited to attend meetings of the Departmental Council as appropriate.

ACADEMIC AND ADMINISTRATIVE COMMITTEES

Dean's Executive Committee

Terms of Reference

The Dean's Executive Committee is the executive body of the College of Medicine.

The Committee may delegate authority to execute decisions. It is kept informed of progress on all activities in the College of Medicine through its administrative officers. It is served by a number of sub-committees with specific terms of reference.

Membership

- | | | |
|----|---|------------|
| a) | Dean, College of Medicine | Chairman |
| | Vice Deans | Ex-officio |
| | College Secretary | Ex-officio |
| b) | Any other person with special knowledge or expertise may be invited to attend meetings of the Committee as appropriate. | |

Dean's Advisory Committee

Terms of Reference

The Committee shall advise the Dean on major matters relating to the operation of the College of Medicine.

Membership

- | | |
|---------------------------|------------|
| Dean, College of Medicine | Chairman |
| Vice Deans | Ex-officio |
| Chairmen of Departments | |
| College Secretary | Ex-officio |

Education Committee

Terms of Reference

- a) The Committee shall be charged with the responsibility for developing, reviewing and amending the undergraduate and postgraduate curricula leading to the degrees of B.Sc. (Basic Medical Sciences), MD and MSc. of the Arabian Gulf University and any other appropriate degree programmes.
- b) The Committee shall be charged with the responsibility for developing, reviewing and amending a scheme for the assessment of students pursuing the undergraduate curricula leading to the degrees of B.Sc. (Basic Medical Sciences), and MD of the Arabian Gulf University and any other appropriate degrees.
- c) The Committee may delegate any part of its responsibilities to its two Sub-committees:
The Curriculum Sub-committee
The Assessment and Evaluation Sub-committee.

Membership

- a) Vice Dean, Academic Affairs
Vice Dean, Undergraduate Education
Dean, College of Medicine
Vice Dean, Administration
Chairman, Curriculum Sub-Committee
Chairman, Assessment Sub-Committee
Pre-medical Course Co-ordinator
Community Health Co-ordinator
Professional Skills Co-ordinator
Chairmen, of Unit Systems

Two representatives of the Medical Students' body - one from Pre-clerkship and the other from the Clerkship Phase.
- b) Any other person with special knowledge or expertise may be invited to attend meetings of the Committee as appropriate.

Chairman
Deputy Chairman
Ex-officio
Ex-officio

Educational Resources Committee

Terms of Reference

The Committee shall be responsible for:

- a) Monitoring the management and running of the Medical Library with its educational resources
- b) Instituting procedures and regulations to improve the utilization of the Library
- c) Planning and supervising audio-visual material used for self-learning
- d) Reviewing the departmental requests and recommending the final allotments within the proposed budget
- e) Preparing an annual budget
- f) Preparing an annual report

Membership

- a) Vice Dean, Undergraduate Education
Dean, College of Medicine
Director of Medical Resources Centre

Ex-officio and Chairman
Ex-officio
- b) One representative of the Central University Library.
- c) The Chairman or his representative from each department.
- d) Membership of the Committee shall be limited to two years (with the exception of ex-officio members and the Central University Library Representative), with eligibility for reappointment after one year.

Medical Research Committee

Terms of Reference

The Committee is the principal research body for the College of Medicine & Medical Sciences and is responsible for:

- The review and assessment of all research proposals.
- Determining which research proposals shall be reviewed locally and which shall be reviewed externally.
- Determining additional inputs for funding decisions e.g. ethical review, radiation protection etc.
- Developing mechanisms to foster research and obtain funding from outside agencies in Bahrain, the Gulf Region and overseas.

Membership

- Vice Dean, Research
Dean, College of Medicine
Vice Dean, Academic Affairs
Ex-officio and Chairman
Ex-officio
Ex-officio
- Six academic staff members appointed by the Dean's Executive Committee to represent the basic medical science and clinical departments.
- Any other person with special knowledge or expertise may be invited to attend the meetings of the Committee as appropriate.
- Continuous membership of the Committee can be up to two years (with the exception of ex-officio members) with eligibility for reappointment. Any proposal to change the membership of the Committee shall be referred to the Dean's Executive Committee.

Admissions Committee

Terms of Reference

- The Committee shall prepare recommendations on the size of the annual student intake.
- The Committee shall be responsible for preparing and revising the admission requirements and regulations for the B. Sc. degree and the MD degree of the Arabian Gulf University and any other appropriate academic programme.
- The Committee shall prepare the provisional list of selected candidates to appear for the entrance examinations of the College of Medicine and Medical Sciences in accordance with University regulations.
- The Committee shall arrange the appropriate entrance examinations and interview for the provisionally selected candidates.
- The Committee shall also consider any other matters relating to admissions referred to it by the Dean.

Membership

- | | |
|--|------------|
| Vice Dean, Student Affairs & Alumni | Chairman |
| Dean, College of Medicine | Ex-officio |
| Vice Dean, Academic Affairs | Ex-officio |
| Vice Dean, Undergraduate Education | |
| University Registrar | Ex-officio |
| Three representatives from the Departments | |

Faculty Promotions Committee

Terms of Reference

The Committee on Promotion is appointed by the College Council and reports to the Dean. The function of the Committee is to make recommendations to the Dean concerning all matters related to the promotions of academic staff.

Membership

- a) The Committee shall consist of seven members, all of whom shall be Professors with full-time appointments in the College of Medicine. One half of the membership shall have clinical appointments and the other half shall have basic medical science appointments in the College of Medicine. The members of the Committee shall be nominated by the Dean after consultation with the Chairmen of Departments, and approved by the College Council.
- b) Committee members may serve for two academic years which shall constitute a full term. No member may serve for more than two consecutive full terms.

Anaesthesia

William A Tweed (Professor & Chairman) MD, FRCP(C)

Anatomy

Raja C Bandaranayake (Professor & Chairman) MBBS, PhD, MSED, FRACS
 Pallab K Ganguly (Associate Professor) MBBS, MD, FACA
 Manoj Chakravarty (Assistant Professor) MBBS, MS
 Nassir Abdul Latif (Assistant Professor) PhD
 Osam A Awad (Demonstrator) MBBS

Biochemistry

Brian D'Monte (Associate Professor & Acting Chairman) MBBS, MD
 Abdul Rahman Al-Atawi (Assistant Professor) MSc, PhD

Family & Community Medicine, Epidemiology & Biostatistics

I Neil Grant (Professor & Chairman) MB, ChB, CCFP, FCFP
 K Ramachandran (Professor) BSc, MStat, MHS (Hopkins), DISJ, FMS, AIS (Lon)
 Faisal Al Nasir (Assistant Professor) MB, ChB, FPC, MRCP, PhD
 Khaldoun Al-Roomi (Assistant Professor) MD, MPH, PhD
 Randah Hamadeh (Assistant Professor) BSc, MSc, D.Phil. (Oxon.)

Internal Medicine

Roger K Ferguson (Professor & Chairman) MD, MS, FACP, FACC, FACCPC

Microbiology, Immunology & Infectious Disease

John F Greally (Professor & Acting Chairman) BSc, MD, BAO, MSc, MA, FRCPI
 Eldirdiri A Babiker (Assistant Professor) MBBS, PhD
 Khalid S Tabbara (Assistant Professor) BSc, PhD
 Abdul Rahman Youisif (Assistant Professor) BSc, MSc, PhD
 Mariam Ghuloom (Assistant Professor) BSc, PhD

Obstetrics and Gynaecology

Mohamed R Rajabie (Associate Professor and Chairman) MD, PhD, FACOG

Paediatrics

Myung Park (Professor & Chairman) MD, FABP
 Hafiz El-Shazali (Professor) MBBS (Kht), FRCP (Lond), DCH, PhD, FAAP
 Akbar Mohsin Mohammed (Associate Professor) MD, DABP, FAAP
 Marie T Greally (Assistant Professor) MB, BCh, MSc, DStats, FACMG

Pathology

John F Greally (Professor & Chairman) BSc, MD, BAO, MSc, MA, FRCPI
 Ali Abdul Satir (Professor) MBBS, DCP, MRCP(ath), FRCC Path

Pharmacology & Therapeutics

Vijay S Mathur (Professor & Chairman) MBBS, MD, D.Phil. (Oxon.), FAMS
 Reginald P Sequoia (Associate Professor) MSc, PhD
 Khalid A Jassim (Assistant Professor) PhD

Physiology

Usha Nayar (Professor & Chairperson) MBBS, MD, PhD, FAMS
 Ken D Lukowiak (Professor) BSc, PhD
 Tarik A Abdul-Ghafar (Assistant Professor) BSc, PhD

Surgery

George M Abouna (Professor & Chairman) BSc, MBBS(Dur), MS(Newcastle), FRCS, FRCSC, FACS, FICS, FRSM
 M Hosam Hamdy (Professor) MBBS(Alex), MCh, FRCS (Ed), FACS
 Francis E LeBlanc (Professor & Chief of Division of Neurosurgery) MD, PhD, FRCSC, FACS

Anaesthesia						
Abdul Jalil Al Kooheji	SMC	Clinical Associate Professor				
Dermatology						
Khalil E Al Arrayed	SMC	Clinical Assistant Professor				
ENT						
Ahmed Jassim Jamal	SMC	Clinical Assistant Professor				
Mohd S Al Khabaz	SMC	Clinical Assistant Professor				
Salman Al Khalifa	BDF	Clinical Assistant Professor				
Ameen Al Saati	SMC	Clinical Tutor (Honorary)				
Family & Community Medicine						
Tawfiq Ali Nasseb	MOH	Clinical Assistant Professor				
Fawzi A Ameen	MOH	Clinical Lecturer				
Nada Hafadh	MOH	Clinical Lecturer				
Shawki Ameen	MOH	Clinical Lecturer				
Adel Ahmed Khadem	MOH	Clinical Tutor				
Ahmed A G Al Garf	MOH	Clinical Tutor				
Akhtar A Latif Sarwani	MOH	Clinical Tutor				
Basheer Makrim	MOH	Clinical Tutor				
Ebtisam Fakhro	MOH	Clinical Tutor				
Khariya Moosa Hussain	MOH	Clinical Tutor				
Mariam Al Jalahma	MOH	Clinical Tutor				
Raouf H Othman	MOH	Clinical Tutor				
Internal Medicine						
Ali Mohd Al Sindi	SMC	Clinical Assistant Professor				
Abdul Rahman Bu Ali	BDF	Clinical Assistant Professor				
Fuad A Qader Saeed	BDF	Clinical Assistant Professor				
Ghazi M H Al Mahroos	SMC	Clinical Assistant Professor				
Iftakhar Ahmed Khakar	BDF	Clinical Assistant Professor				
Ichad R Al Qameesh	SMC	Clinical Assistant Professor				
Reda Ali Ebrahim	SMC	Clinical Assistant Professor				
Salwa M H Al Mahroos	SMC	Clinical Assistant Professor				
Saeed Al Saffar	SMC	Clinical Tutor				
Ahmed S Al Arrayed	SMC	Clinical Tutor				
Mahdi A Hassan	SMC	Clinical Tutor				
Resan H Badran	BDF	Clinical Associate Professor				
Abdul Hai A Al Awadi	SMC	Clinical Assistant Professor				
Murtada A Halim	BDF	Clinical Assistant Professor				
Ali Akbar Murad	SMC	Clinical Tutor				
Marie Habib Turief	BDF	Clinical Tutor				
Adel A Ali Al Jishi	SMC	Clinical Assistant Professor				
Sameer Al Arrayed	SMC	Clinical Lecturer				
Microbiology						
Abdul Aziz A Yousif	SMC	Clinical Assistant Professor				
Khalid M Bindaayna	SMC	Clinical Assistant Professor				
Obstetrics & Gynaecology						
Affaf Al Shafie	SMC	Clinical Assistant Professor				
Amarjit K Sandhu	SMC	Clinical Assistant Professor				
Jagjeevan K Dhaliwal	SMC	Clinical Assistant Professor				
Khalil E Rajab	SMC	Clinical Assistant Professor				
Nabil A Rizkalla	BDF	Clinical Assistant Professor				
Yousif A. Bashmi	SMC	Clinical Tutor				
Mooza R A Bu Nashi	BDF	Clinical Tutor (Honorary)				
S A Sabah Baig	BDF	Clinical Tutor (Honorary)				
Ophthalmology						
Ahmed A Ahmed	SMC	Clinical Associate Professor				
Hassan Al Arrayed	Priv	Clinical Assistant Professor (Honorary)				
Momen Al Reedy	BDF	Clinical Assistant Professor (Honorary)				
Nabil Shirawi	SMC	Clinical Lecturer				
Ebtisam K Alawi	SMC	Clinical Tutor				
Pathology						
Fayek Al Hilli	SMC	Clinical Associate Professor				
Paediatrics						
Abbas Abdul A'al	SMC	Clinical Assistant Professor				
Abdul Jabbar Al Abbasi	SMC	Clinical Assistant Professor				
Abdul Hadi Ebrahim	SMC	Clinical Assistant Professor				
Abdul Nabi A H Al Saif	SMC	Clinical Assistant Professor				
Babiker H Kambalawi	BDF	Clinical Assistant Professor				
Fadhila T Al Mahroos	SMC	Clinical Assistant Professor				
Fussain J Al Mukharraq	SMC	Clinical Assistant Professor				
Mohd Najib Samiee	SMC	Clinical Assistant Professor				
Mohd Hussain Rufai	SMC	Clinical Assistant Professor				
Psychiatry						
Mohd K Al Haddad	SMC	Clinical Associate Professor				
Charlotte Kamal Awad	SMC	Clinical Assistant Professor				
Ahmed M Al Ansari	SMC	Clinical Assistant Professor				
Radiology						
Aysha Mubarak Jaber	BDF	Clinical Assistant Professor				
Mona Booz	SMC	Clinical Lecturer				
Abdulhameed Al Awadi	SMC	Clinical Tutor				
Umesh J Nabar	SMC	Clinical Tutor				
Surgery						
Abdul Aziz Y Hamza	SMC	Clinical Assistant Professor				
Abdul Rahman E Fakhro	SMC	Clinical Assistant Professor				
Abdul Wahab M A Wahab	SMC	Clinical Assistant Professor				
Alawi H Al Alawi	SMC	Clinical Assistant Professor				
Armerding, Paul	AMH	Clinical Assistant Professor (Honorary)				
Habib E Turief	BDF	Clinical Assistant Professor				
Khalid Ali Al Khalifa	BDF	Clinical Assistant Professor				
Khalil Hassan Rasromani	SMC	Clinical Assistant Professor				
Mohd Amin Al Awadi	SMC	Clinical Assistant Professor				
Tariq Abdul Hameed	BDF	Clinical Assistant Professor				
Khalifa Bu Rashid	SMC	Clinical Tutor				
Tariq Mohd Saeed	Priv	Clinical Assistant Professor (Honorary)				
Mohd H Al Durazi	SMC	Clinical Assistant Professor				
Mohd R Samiee	SMC	Clinical Assistant Professor				
Shaher Al Mutawa	SMC	Clinical Lecturer				
Ali A Al Khalifa	BDF	Clinical Associate Professor				
Faisal Al Mousawi	SMC	Clinical Assistant Professor				
Abdulla A H Al Malki	SMC	Clinical Assistant Professor				
Ali Jaffer Al Aradi	SMC	Clinical Assistant Professor				

SMC - Salmaniya Medical Centre, MOH - Ministry of Health, BDF - Bahrain Defence Force Hospital

The academic and administrative building of the College of Medicine and Medical Sciences is located at the Salmaniya district in Manama, Bahrain. Since the College does not have its own University Teaching Hospital, clinical training of medical students is undertaken at two affiliated hospitals: The Salmaniya Medical Centre with approximately 1000 beds

which is the main hospital of the Ministry of Health and the Bahrain Defence Force Hospital (BDF) with approximately 300 beds. In addition Health Centres in Bahrain and in other Gulf States are used for training in Family and Community Medicine. The staff and students accommodation and sporting facilities are located at the Sakhir Campus.



Student accomadation at Sakhir Campus

The College of Medicine and Medical Sciences (CMMS) was the first College established in the Arabian Gulf University (AGU). The main aim was to graduate more physicians. However it was thought proper to follow the new trend of

innovative medical training, which is essentially a problem-based, integrated curriculum, laying great emphasis on critical thinking and problem solving abilities. The curriculum also emphasises self-directed and continuous learning.

Goals and Objectives

The CMMS aims at graduating competent physicians who:-

1. Having acquired:

Knowledge of Medical Sciences, the necessary professional responsibilities (towards patients and families, colleagues, self and community).

Essential professional skills (clinical, communication, ethical and behavioural) enable them to undertake work in the comprehensive health care field (preventive, curative, rehabilitative and developmental).

2. Interact positively with the community, participate in comprehensive care planning and the education of the community.
3. Are well versed in identifying patient problems, generating appropriate hypotheses of illness and instituting appropriate plans of investigation and treatment.
4. Have demonstrated abilities of self learning and continuing self education.
5. Are capable of activating and undertaking research programmes in the basic, clinical, or related social fields.
6. Enhance the humanistic values of Islam and Arab civilization.
7. Have a keen insight into the economics and the cost effectiveness of health care delivery strategies.

UNDERGRADUATE MEDICAL PROGRAMME

Curriculum Phases

Year		
6	Clerkship Phase	M.D.
5		
4	Unit / System Phase	B.Sc.
3		
2		
1	Pre-Medical Phases	

Summative Assessment



UNDERGRADUATE MEDICAL PROGRAMME

Curriculum Map

Year				MD
Unit VIII Clerkship Rotations 5 + 6	16 Wks		16 Wks	8 Wks
	Gen Surgery 10 wks Uro 2 wks Ortho 2 wks Anasth 2 wks	Ob/Gyn 10 wks ENT 2 wks Radio 2 wks Ophthal 2 wks	Fam Med 6 wks A&E 2 wks	Review 4 Wks
Continuous Assessment				→
Problem Based Multi-Disciplinary Seminars				June
Unit I - VIII	16 Wks		16 Wks	6 Wks
	Gen Med 10 wks Cardio 2 wks Nephro 2 wks Neuro 2 wks	Pediatrics 10 wks Psychiatry 4 wks Derma 2 wks	Elective 4 wks	Holiday 4 Wks
Continuous Assessment				→
September				Problem Based Multi-Disciplinary Seminars
September				June
4	Unit V Metabolism Endocrine & GIT	Unit VI Nervous System Human Behaviour	Unit VI Musclar-Skeletal Skin	BSc. (Basic Med. Sc.)
	Professional Skills and Community Health			
3	Unit VIII CVS, Respiratory & Renal		Unit IV Reticulo-Endothelial (Blood) + Immunology + Infectious Diseases	Elective
	Professional Skills and Community Health			
2	Introduction	Unit I Concepts and Principles	Unit 2 Life Cycle and Reproductive	Professional Skills and Community Health
	Professional Skills and Community Health			
1	Pre-Med			

Continuous Assessment
 End of Rotation Examination
 Summative Examination

Problems	Clerkship	Holidays
Year 2 (30) Year 3 (32) Year 4 (28)	One Phase, 88 wks. Five Rotations and One Elective with	1 week Inter-Semester 1week Eid Al-Fitr 1 week Eid Al-Adha
Total 90 + 262 mini-problems	60 Problem Solving Sessions	4-6 weeks Summer Holiday

CURRICULUM STRUCTURE AND ORGANIZATION

The programme is of six years duration divided into three phases:-

A.	Pre-medical Programme	1 year
B.	Unit System	3 years
C.	Clerkship Phase	2 years

By the end of Year 4 the students will complete the requirements for the B.Sc. (Basic Medical Sciences) and obtain a Bachelor Degree.

By the end of Year 6 the students will complete the requirements for the M.D. Degree Qualifying Examinations.

A. Pre-medical Programme

Students who wish to study medicine at the Arabian Gulf University Medical School must complete one year of Pre-medical preparation before they can be accepted into the Medical Programme. During this period the students are enrolled in courses of English, Sociology, Islamic Culture, Psychology, Computer Science, Biology, Chemistry, Integrated Sciences and Biostatistics.

The objective of this programme is to prepare the students, who are generally graduates of High Schools, for the medical programme and its innovative system in terms of knowledge, skills and attitudes and to prepare them for self directed learning and problem solving methods. It is also designed to improve students ability to write, read and understand English which is the medium of instruction.

Subjects and Credit Hours of the Pre-Medical Phase

Semester I		Semester II	
Subjects	Credit Hours	Subjects	Credit Hours
Chemistry	3	Physics	3
Biology I	3	Biology II	2
Islam and History of Medicine	2	Islam and Medicine	2
Psychosocial Science	3	Biostatistics	2
English I	5	Computer	2
		English II	5
Total	16	Total	16

CURRICULUM STRUCTURE AND ORGANIZATION

B. Unit System (Pre-Clerkship)

The unit system phase addresses the concepts and principles in the field of medicine in an integrated and related manner.

This includes clinical sciences, basic medical

sciences, professional skills, community health activities as well as behavioural and ethical issues. Each unit covers a system/organ in an integrated manner through study of health problems.

This phase runs for 3 years and is divided into seven Units:

Unit I	Concepts & Principles
Unit II	Life Cycle & Reproduction
Unit III	Cardiovascular, Respiratory & Renal
Unit IV	Reticulo-endothelial, Immunity and Infectious Diseases
Unit V	Metabolism, Endocrine & GIT
Unit VI	Nervous System & Human Behaviour
Unit VII	Musculo-Skeletal & Skin

The learning activities in each Unit are:-

1. Unit Problems "Tutorial"
2. Professional Skills
3. Community Health Activities

1. Unit Problems



Each Unit addresses a system/organ. The themes and general objectives related to this system are drawn up by the Unit Committee.

The Committee chooses the appropriate problems according to certain criteria - common, serious, treatable, appropriate for level, covers multi-system, and which lend themselves to teaching basic medical sciences.

A co-ordinator is assigned to each problem. He/she meets with the resource people to decide on the specific objectives of the problem. The problem is then written, the resource faculty, reading material and references are identified.

The students in each year are divided into small groups of 6-8 students. A tutor is assigned to each group to facilitate the learning process. Each week the students go through one problem which constitutes the focus of learning.

Each unit has its related Professional Skills and Community Health activities.

2. Professional Skills Programme

This programme is one of the important strands in the curriculum. The student is introduced at an early stage to a core of clinical skills with emphasis on the communicational and attitudinal dimensions. Applied Basic Sciences skills are also covered.



Main characteristics of the programme

1. Emphasises on learning skills in a controlled, standardized and relaxed environment. The College skills lab has been further developed and organized to be maximally utilized by the students.
2. Students learn the skills under the supervision and direction of a selected group of expert tutors.
3. Simulated patients are used to ensure mastery of basic clinical examination techniques.
4. Exposure to real patients is kept for a later stage of the training when the student feels comfortable to have a real encounter with a patient. This ensures a humane relationship between the students and the patients.
5. Formative assessment is given after each system.
6. Summative assessment is conducted using the clinical encounter station approach, simulated patients and written case histories.

General Outlines

- It extends, and is distributed, through out the curriculum from Year 2 to Year 4.
- It is co-ordinated with the unit/system and the learning problems.
- Two main domains are covered:
 - > Communication skills, medical history taking and physical examination.
 - > Applied basic medical sciences.

3. Community Health Activities

The Community Health Programme is a critical and integral component of the undergraduate medical curriculum of the College of Medicine and Medical Sciences. It aims to promote an ecological perspective - the individual, his/her problems, the family and community, adapting and responding to environmental challenges, with health as a critical resource. It offers clinical learning experiences in a

community setting, and an introduction to key concepts in community medicine, public health, and family medicine. Students undertake research and study projects that foster the development of a community and family perspective, the skills to explore and assess the need for, and effectiveness of, specific aspects of health care systems, as well as the structure and dynamics of families and communities.

The Community Health Programme has the following goals:

To involve students in a range of learning experiences in the community setting with:

- A Research Project that explores community and population health and health care issues.
- A Family Studies Programme that explores the role of families in society, and their adaptive qualities.
- A "Health and Wellness" approach to significant groups within a population (women and children).
- A Patient Centred Care initiative, that deals with individuals, their beliefs and values, and how these interact with the health care system and its professionals.

To expose students to key behavioural, environmental and socio-cultural concepts in community medicine, public health and family medicine, within a health care planning cycle model:

- Burden of illness (impact of problem)
- Causation (known risks or causes)
- Interventions (strategies to prevent or alleviate)
- Efficiency (costs versus benefits)
- Implementation (realistic vis a vis resources)
- Evaluation

To foster and develop in students the appropriate inquiry, analytical, appraisal and synthesizing skills, that will allow them to:

- Assess health problems at the individual, family and community levels.
- Develop clinical, health policy and/or educational strategies in response to such problems, that are based on sound evidence.
- Measure the effectiveness of such interventions.

C. Clerkship Phase - Unit VIII

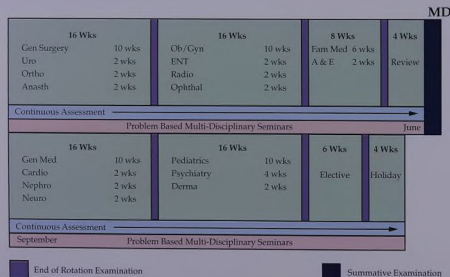
Phase III (Clinical Clerkship - Years 5 & 6)

The clerkship is the final phase of the undergraduate curriculum. The main goal of this phase is to prepare the student for his/her future career as a successful and effective physician. The clerkship largely consists of clinical training, hospital or health centre based, which is a supervised work experience in a setting similar to the one in which the trainee will eventually work as a Physician.

The central goal for the clerkship phase is to prepare the student to acquire the competence and the ability to identify, analyse and manage clinical problems in order to provide efficient, cost-effective, and humane patient care.

The training aims at developing in the student essential dimensions of his professional responsibility, clinical skills and problem solving abilities.

Medical Curriculum Map for Unit VIII
Clerkship Rotations



Model of Student Activities on a Typical Week in a Clerkship Rotation

Time	Saturday	Sunday	Monday	Tuesday	Wednesday
7.00 to 9.00 am	Service round and Ward activities	Service round and Ward activities	Department educational activity Journal club M & M	Service round and Ward activities	Service round and Ward activities
9.00 to 12.00 noon	Bedside teaching	Outpatient clinic	Teaching round	Bedside teaching	Outpatient clinic
2.00 to 4.00 pm	Clinical problem solving session	Multi-disciplinary seminar			Clinical problem solving session
Until 10.00 pm	On call duties - Twice per week				

- Beside teaching – Two sessions per week
- Teaching round – One session per week
- Outpatient clinic – Two sessions per week
- Clinical problem solving – Two sessions per week
- Surgeries – One operative session per week
- Multidisciplinary seminars – Once a week
- On call duties – Twice per week (stay in hospital - minimum until 10.00 p.m.)

Details of the Clerkship Programme are described in a separate handbook "The Clerkship Logbook", which will be given to the students at the beginning of their clerkship rotation.

Student Electives

Two periods of student electives are identified in the curriculum. Four weeks in the unit/system phase and six weeks in the clerkship phase. It allows the students to explore areas of learning which they feel interested in. It also exposes them to medical education and medical practice

outside the boundaries of the Arabian Gulf University. The College helps the students in communication with different institutions in the Gulf region, Arab countries, Europe, USA and Canada. The educational value of the elective is well appreciated by the students.

General Principles

1. Students are assessed in a comprehensive manner.
2. Continuous assessment is an important component of assessment at all levels of the curriculum, and has a big weightage in the final examination of the two end phases degrees, B.Sc. and MD. Students should realize that they learn not to pass examinations but to be good physicians.
3. Assessment is related to the College and the University Objectives. The assessment is seen as a tool to make the students learn in the desired way, as students learn according to the way they are examined.
4. Assessment follows the learning process of problem solving. The examination questions do not only test knowledge and recall, but mainly problem solving, interpretation abilities and skills.
5. Different types of assessment are used as it is known that no single examination can test the three domains of learning - knowledge, skills and attitude.
6. The continuous assessment includes the skills acquired in the ongoing professional skills programme and the community health activities. These are the skills which the students would need on graduation for his/her practice as a physician.
7. The formative and continuous assessment are heavily used to advise and help students to improve their learning. Students' advisors play a key role in this. The students are involved in the Medical Education Committee, and allowed to voice their ideas and evaluate the process, programme and staff.

Assessment in the Pre-medical Phase

In the pre-medical programme the students take a number of courses in Biology, Chemistry, Physics, English, Physical Social Studies and Islamic Studies. These courses follow a credit hour system, and are assessed on Cumulative Grade Point Average of Four.

At the end of the pre-medical studies, students will be considered for promotion to the medical programme according to their examination achievements.

The following guidelines shall be used as a basis for decision-making in determining the fate of individual students:

1. Only the students who have completed all required courses and obtained a GPA of 2.0 or better shall be promoted to the medical programme.
2. Students who have 10 credits or less remaining to be completed, or a GPA higher than 1.50 but less than 2.0, shall be allowed two additional semesters to fulfil the requirements for promotion to the medical phase.
3. The students who have more than 10 credits remaining to be completed, or a GPA of less than 1.50, cannot continue in the College and shall be recommended for dismissal.
4. Students who have been allowed two additional semesters and do not successfully complete all the required courses or do not obtain a GPA of 2.0 or better at the end of the specified semesters, cannot continue in the College and shall be recommended for dismissal from the programme.

Assessment in the Unit System Phase

Year 2, 3 & 4

I. Continuous Assessment Unit Phase (40%)

1. End of Units Written Examinations 20%

This will take place at the end of each unit (I - VII). A weightage is given to each unit examination totalling 20%.

2. Professional Skills 10%

3. Community Health Activities 10%

* Satisfactory performance on end of Units Examinations, Tutorials, Professional Skills and Community Health Activities is mandatory before sitting the B.Sc. Examinations.

* Student performance at the end of each year will be reviewed. Unsatisfactory performance may lead to repeating the year.

II. End of Unit System Phase Comprehensive Examination (60%) B.Sc. Exam

Written	45%			
OSPE	15%	-	Clinical Skills	10%
		-	(Lab. & Spots)	5%

* B.Sc. grade will be calculated on the aggregate of Continuous Assessment (40% + B.Sc. exam (60%).

Regulations for Pass and Fail for B.Sc. Exam

1. A student is considered successfully passed, if he/she scores 60% or more on the total score of the Continuous Assessment and the Final B.Sc. examination.
2. A student who scores less than 60% will have to repeat the examination in three months time, after a remedial programme. If the student fails again, he/she repeats the year.
3. If he/she fails again at the end of year examination, then the College Council will recommend his/her dismissal from the programme.

Assessment in the Clerkship Phase

Continuous Assessment during the Clerkship Phase is divided into two parts:

- A. Continuous assessment during each rotation
- B. End of rotation examination

The assessment of the five major rotations (Medicine, Surgery, Paediatrics, Obstetrics and Gynaecology, and Family Medicine) represent twenty-five percent (25%) of the Final qualifying mark (5% each). Satisfactory in Continuous evaluation in each rotation is a Pre-requisite for sitting the End of rotation examination.

Students, tutors and training facilities are continually monitored and evaluated in order to enhance the clerkship training.

Continuous Clerkship Evaluation will be judged on:

- Attendance
- Acquired competencies
- Completing the Case Write-up reports
- Satisfactory completion of the Logbooks
- Active participation in the different learning and training activities
- Satisfactory overall student performance
- Completion of form to be signed by the tutor at the end of each clinical rotation
- End of rotation exam conducted in the five (5) major disciplines
- Satisfactory clerkship evaluation in minor rotations is mandatory (ENT, Ophthalmology, Psychiatry, Dermatology, Anaesthesia, Radiology, Orthopaedic, and Urology)

End of Clerkship Rotation Clinical Examinations

The Clinical examinations will take place during the last week of each Clerkship rotation.

Students MUST complete a satisfactory clerkship continuous evaluation before sitting the individual End of rotation clinical examination. The examination will take place in the ward on real patients concentrating on clinical skills, critical appraisal skills and general attitude and behaviour.

Students who fail the End of rotation clinical examination will have the opportunity to re-sit after two (2) weeks.

Students who fail the first re-sit examination will have another opportunity for a second re-sit at the end of the academic year. However they must first complete a three (3) week remedial programme. This can take place during the holiday period.

Any student who FAILS the second re-sit examination must REPEAT that particular clerkship.

Final M.D. Qualifying Examination

This examination is taken after completion of the six years of the medical programme, and having satisfied all the previously set requirements. Continuous Assessment makes 25% of final M.D. score. The final examination is divided into two parts and represents seventy-five percent (75%) of the Final M.D. score:

1. Written	40%
2. Clinical	35%
a. OSCE	15%
b. Clinical/Patient encounter	20%
	75%

Thus the Final M.D. score :

a) Continuous Assessment	25%
b) Final Examination	75%
	100%

**Policy for Pass or Fail in the Final Qualifying Examination**

1. A student shall pass the Final Qualifying Examination if his/her aggregate score is 60% or more.
2. Students who score 55% or above but below 60% will be given an oral examination to decide whether they would pass or fail.
3. All students who score below 60% will fail the examination and shall resit for the written and clinical examination after a remedial programme of six months.
4. A student will be allowed two resits "examinations" (three trials). If he fails the second resit the College Council will recommend that he shall leave the College, having earned a B.Sc. (Basic Medical Sciences) degree.

Assessment Grading for the B.Sc. and M.D. Degree

90% and above	Excellent with Honors
85% Less than 90%	Excellent
75% Less than 85%	Very Good
65% Less than 75%	Good
60% Less than 65%	Pass
Less than 60%	Fail

Students in this category will have an oral examination and those who score 90% or more will also be given honors otherwise they remain as Excellent

The Learning Resources of the AGU are of particular significance in view of the way the curriculum is structured with the emphasis on student self learning.

The two areas of major interest to the staff and student alike are the:

- Medical Library
- Audio-visual Resource Laboratory

Medical Library

The Arabian Gulf University Library is located in two big halls at Level 1 of the main building. The medical college is housed in a double storey section, whereas materials for postgraduate studies (Applied Sciences and Education) is housed in another hall of the library.



The current holdings of the University Library are more than 50,000 volumes, covering various fields of specialization taught at the University.

More than two hundred serials are currently on subscription. Bound periodicals are available from 1985 to date.

Services & Facilities

1. **Borrowing:**
 - Undergraduate Students 5 books for 15 days
 - Postgraduate Students 8 books for 15 days
 - Teaching Staff 10 books per Semester
2. **Research:**

Research facilities are provided to the University teaching staff and students free of charge.

 - Local databases on CD-ROM Medline - Eric - Compendix
 - Subscription to "Dialog" on-line databases
 - Internet
3. **Inter-library Loan:**

AGU Libraries have very strong inter-library loan links with local libraries, and other academic libraries in the GCC Countries. The libraries also provide services, through the British Library Document Supply Centre and EDRS.

Audio-visual Resource Laboratory

This facility is located in the AV. Department on the ground floor. It is fitted out with self contained purpose built AV. booths with Tele/video, 35 mm slide projectors and audio tape facilities. Students can study and review in pleasant and conducive surroundings by the use of high-quality headphones.

In addition to the conventional AV.



facilities, provision has been made for multi media computers, using the latest in interactive CD ROM's especially developed for medical training.

The introduction of the Internet and medical databases such as Medline are

currently being considered and should be available shortly. An extensive existing library of video titles and 35 mm slide sets are available and are housed in the same facility. Staff are available to issue and assist. New titles are purchased on a regular basis on the recommendations of the clinical tutors.

A small viewing room with full AV facilities is also available in the AV. Department for small groups of students who wish to pursue a more interactive approach to their learning process.

In addition to the Student AV. Resource Laboratory, the department provides a full media production service for all staff of the University, services provided include production of teaching slides and materials using conventional means as well as utilizing the latest in computer graphics technology. Limited video production facilities are also available for recording, dubbing and copying. It is hoped to expand and enhance this facility in the very near future to accommodate and compliment the Professional Skills sessions. This will thus allow students to conduct self-evaluations to improve their performances in this critical area.

Admission requirements of the College of Medicine & Medical Sciences include the following:

1. That the applicant be a citizen of one of the Countries of the GCC Council (UAE, Bahrain, Kuwait, Saudi Arabia, Qatar & Oman). A limited percent of the applicants accepted may be Arabs from other nationalities who are residents in one of the GCC Countries.
2. The applicant must meet the University requirements by obtaining a cumulative average of 85%, or higher in the high school certificate.
3. The applicant must be nominated by the relevant Ministry in their Countries (Ministry of Education, Ministry of Higher Studies, etc.).
4. The applicant must submit a completed application form and all required supporting documents, including health fitness and good conduct certificates.
5. Applicants must sit for a written Admission examination in Science and in English language.
6. Applicants must undergo a structured interview conducted by the College faculty.
7. Students will be chosen from among the applicants based on their collective evaluation scores in the various examinations and the interview.

The College's annual student intake is about 60 students. This relatively small number of students is important for the success of the educational programme.

Academic counselling and guidance of students is an essential activity which aims to support and motivate student learning and to alleviate student academic concerns resulting from lack of understanding of expected performance levels, inability to adjust to new learning methods, or the multiplicity of learning resources. The need for student counselling and guidance becomes more essential given

the College's self-learning approach. Each student is assigned to a faculty advisor at the time of joining the college, and students are encouraged to remain in close contact with their advisors. The advisors become essentially the mentors of these students guiding them through difficult times to insure a positive outcome from the academic experiences of the student.P

Student Affairs

The office of student affairs at the College is concerned with the academic needs and affairs of all students at the College. It aims to support, develop and enhance student interaction within an academic setting, to respond to the needs of students within the College and in their professional training relations with other institutions.

The student affairs office also co-ordinates a variety of activities within the College including student admissions, academic advisory system, and election of student representation on College committees. The office has an open-door policy and aims to develop a positive relationship with students through which the common goals of the College are fulfilled.

Extra curricular student activities are co-ordinated through the University student affairs office. It includes social, cultural and sports activities. Activities are organized by elected student committees. Several general knowledge competitions, plays, picnics and sports competitions are held yearly. These activities enrich student life at the College.

Registration

Accepted students should register within the first week of the academic year. Each new student receives a student guide containing information about registration and an I.D. card.

Student Fees

Last year it was decided to make the fees BD 4,000/- per year, and this would increase by 5% yearly to a maximum of BD 5,000/- by the year 2000/2001. This includes tuition and registration only. For Housing and transport the student will have to pay BD 500/- yearly.

Class Attendance

Students are expected to attend all scheduled activities - tutorials, laboratory and clinical activities. Absence of 25% or more from these activities will bar the student from the next examination.

Dismissal

Dismissal for academic performance is discussed under evaluation.

A student who fails to live up to the expected principles and values of academic integrity and scholarship will be barred from registration for the following academic year.

A second instance of irregular academic behaviour will result in dismissal from the University.

If a student misses 25% of the scheduled activities, without permission or good reasons, for two semesters, he/she will be dismissed from the College.



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