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## 1. Message from the Vice Chancellor

Dear Students:

Congratulations and welcome to the RAK Medical and Health Sciences University (RAKMHSU). I also welcome our returning students who will be commencing their respective semesters with their respective constituent colleges.

The vision of His Highness Sheikh Saud Bin Saqr Al Qasimi, Crown Prince & Deputy Ruler of Ras Al Khaimah has been accomplished with the establishment of RAKMHSU.

The MBBS program was introduced in the academic year 2006 and other programs such as the Bachelor of Dental Surgery (BDS), Bachelor of Pharmacy (BPharm) and, Bachelor of Nursing (B.Sc Nursing) were added in the year 2007, and a new program: Bridge Program for B.Sc Nursing (RN-BSN) has been added to our list from the academic year 2008-09, after receiving the accreditation for all these programs from CAA, under the Ministry of Health, UAE.

Now the University is pleased with the development of new Masters programs in both Pharmacy and Nursing (MS in Pharmacy Practice, MS in Pharmaceutical Chemistry & MS in Adult Health Nursing). For all these programs CAA has granted Initial Accreditation. University has already taken steps to start these programs by September 2011.

With the completion of the new building with all the state of the art facilities in a record time, RAKMHSU is aiming to provide a favorable ambience for learning and in the process establish the legacy of academic quality. While efforts are being made to provide maximum learning opportunities, it is the responsibility of every student to utilize all the academic and other physical facilities in a way that brings pride to the teachers and parents as well.

RAKMHSU shall strive to kindle in each student the lifelong desire and expertise of seeking and utilizing new information in the pursuit of the solutions to health problems and educating those in need of health care. We hope that every student who is a part of larger health care team, practices every skill with empathy and effective utilization of health care resources for the benefit of the society.

Every student should be well versed with all the guidelines incorporated in the catalog and we look forward to facilitating your endeavor to become outstanding leaders in health care services.

Welcome to RAKMHSU – your new alma mater.



**Dr S Gurumadhva Rao**

## **2. Vision & Mission**

### **Vision**

To be a leading Medical and Health Sciences University in the UAE dedicated to the pursuit of academic excellence by fostering, disseminating and applying knowledge and intellectual values to ensure an enriching future for the student community and preparing them to join the medical and health sciences field of the 21st Century.

### **Mission**

RAK Medical and Health Sciences University is committed, through its offering of academic programs in the medical and health sciences fields, to prepare graduates who are able to develop critical skills in their practice and application of knowledge, equipping them with practical and clinical skills and knowledge and enabling them to make a valuable contribution to patient and health care as individuals and as responsible members of society. The University is also committed to contributing to the advancement of knowledge through its support for research conducted by its faculty and students, and the promotion of lifelong learning bound by ethical clinical practice.

*Details of the Goals of the University appear in Section 2 of the Students Handbook*

### 3. ACADEMIC CALENDAR 2011-2012

#### Semester I

Day	Date	Description
Thursday	29 Sept 2011	Orientation & Registration Convocation
Sunday	2 Oct 2011	Semester begins
Sun-Thurs	6 - 10 Nov 2011	Mid Semester Break - Eid Al Adha Holidays
Saturday	26 Nov 2011	Al Hijra New Year
Sun - Thurs	27 Nov – 1 Dec	<b>Mid Semester Examinations</b>
Fri-Sat	2 - 3 Dec 2011	UAE National Day
Saturday	1 Jan 2012	<b>Announcement of Continuous Assessment Grades</b>
Sun-Thurs	22 – 26 Jan 2012	Remedial Examinations
Thursday	26 Jan 2012	Semester Ends
Mon – Sat	29 Jan – 2 Feb 2012	Revision Break
Saturday	4 Feb 2012	Prophet's Birthday
Sunday	5 Feb 2012	End-Semester Examination begins <sup>#</sup>
Thursday	16 Feb 2012	Announcement of Results
Sun-Thurs	19-23 Feb 2012	Vacation

Note: Islamic holidays are determined after sighting the moon. Thus actual holidays may not coincide with the dates in this calendar. In the event of loss of teaching days due to any unscheduled closings, the semester(s) may be extended.

There will be a minimum gap of one day between two exams at End Semester Examinations and these examinations can also be on Saturdays

## Semester II

Day	Date	Description
Sunday	26 Feb 2012	Registration and Orientation. Last date for the payment of fee for all students, without fine
Monday	27 Feb 2012	Semester begins
Sunday - Thursday	15 – 19 Apr 2012	<b>Mid Semester Break / Repeat I Exams</b>
Sunday - Thursday	6 – 10 May 2012	<b>Mid Semester Assessment</b>
Sunday	14 June 2012	<b>Announcement of Continuous Assessment Grade Point</b>
Sunday	17 June 2012	Leilat al-Meiraj
Sun-Thurs	24 - 28 June 2011	Remedial Examinations
Thursday	28 June 2012	Semester ends
Sunday - Wednesday	1 –5 July 2012	Revision Holidays
Sunday	8 July 2012	End Semester Exam begins
Thursday	19 July 2012	Announcement of Results
Friday	22 July 2012	Vacation begins
Tuesday	4 Sep 2012	Academic Year begins for Semester I
Sunday	9 Sep 2012	Academic Year begins for existing students

Note: Islamic holidays are determined after sighting the moon. Thus actual holidays may not coincide with the dates in this calendar. In the event of loss of teaching days due to any unscheduled closings, the semester(s) may be extended.

There will be a minimum gap of one day between two exams at End Semester Examinations, and these examinations can also be on Saturdays

## **4. History and Background**

### **RAK Medical and Health Sciences University (RAKMHSU) - A Brief History**

RAK Medical and Health Sciences University (RAKMHSU) have been set up by Ras Al Khaimah Human Development Foundation (RAK-HDF) under the visionary leadership of His Highness Sheikh Saud Bin Saqr Al Qasimi, Ruler of Ras Al Khaimah and Chancellor of RAKMHSU. RAK-HDF is a joint venture of RAK Government, Al Ghurair Investments and Emirates Trading Agency and Associated Constructions and Investments, popularly known as ETA Ascon Group.

RAK Medical and Health Sciences University was granted the initial licensure and initial accreditation for MBBS in July 2006. Consequent to this classes for the first intake of students to the MBBS program were started in October 2006. The undergraduate programs in Dentistry, Pharmacy and Nursing were started from September 2007. The registered Nurse-Bachelor of Science in Nursing Bridge program was started in September 2008. All programs were started after obtaining initial accreditation from the Commission for Academic Accreditation (CAA) under the Ministry of Higher Education and Scientific Research.

Masters in Pharmacy Practice, Pharmaceutical Chemistry and Adult Health Nursing have recently been granted the Initial Accreditation by the CAA. University plans to start these programs in the Academic Year 2011-2012.

RAK-MHSU initially commenced its operations from the campus at Burairat but from February 2009 it has moved to its newly constructed campus adjoining Sheikh Saqr Hospital in Ras Al Khaimah, with state-of-the-art facilities including lecture halls, faculty rooms, multipurpose laboratories, skills laboratories, anatomy dissection hall, library, students center and administrative offices.

RAK College of Dental Sciences, FZC, Ras Al Khaimah, in collaboration with RIPA International, Pakistan, has sponsored RAK College of Dental Sciences, and operates from the same RAKMHSU Campus. The College will shortly move to its new independent premises, located within a short distance from the main campus.

## **5. LICENSURE**

RAK Medical & Health Sciences University located in Ras Al Khaimah is officially licensed by the Ministry of Higher Education and Scientific Research of the United Arab Emirates to award degrees/qualifications in higher education.

The process of renewal of licensure has been initiated and is currently in progress.

The following programs have initial accreditation from the Ministry of Higher Education and Scientific Research

### Undergraduate

- Bachelor of Medicine and Bachelor of Surgery

- Bachelor of Dental Surgery

- Bachelor of Pharmacy

- Bachelor of Science in Nursing

- Registered Nurse-Bachelor of Science in Nursing Bridge Program

### Postgraduate

- Masters in Adult Health Nursing

- Masters in Pharmacy Practice

- Masters in Pharmaceutical Chemistry

## **6. University Facilities**

### **6.1 Use of University Facilities**

The University reserves the right to set reasonable time, place and manner restrictions on all meetings, gatherings or get-togethers to ensure that the most beneficial use of the buildings and grounds of the University are made and that there is no interference with the rights of students to the educational process.

The use of University facilities should not imply an endorsement of any individual, group or organization. The name of the University shall not be identified in any way with the aims, policies, programs, products, or opinions of any individual, groups or organizations, which may meet in University buildings, or on University grounds.

No University building, or part thereof, or grounds, may be occupied as living rooms or bedrooms, except those duly set aside and operated for such purposes.

#### **6.1.1 Use of Classrooms, Laboratories and Office Space**

Assignment of space in University buildings for continuing use by the College, Departments or other units for use shall be made by the Vice Chancellor. These assignments shall be made on a semester-by-semester basis.

Members of the University faculty, staff or students, who are assigned the office space in a building on campus, and who have been authorized to have a key to the main door of the building, shall be authorized to use such assigned office space whenever their work may require such use.

#### **6.1.2 Use of Computers and Computer Lab**

The purpose of the computing ethics and guidelines on use of computers is to help maintain an information technology infrastructure that supports the basic mission of the University. Information technology is a critical resource for the University, as it acquires and distributes data for the purposes of teaching, learning, research, and management. These guidelines rely on common sense and ethical behavior to protect the privacy and access rights of each member of the community. Failure to adhere to these guidelines can result in the suspension of computing privileges.

Students, faculty, and administrators at University have basic rights regarding computing: privacy and access to an equitable share of hardware, software, and network resources. It is unethical for any person to violate these rights.

University owned computing resources are intended for administrative, research, and educational purposes only; and hence they shall be used in a manner consistent with the administrative, instructional, and research objectives of the University. They should not be used for personal profit, commercial development, or frivolous activities.

#### **6.1.2.1 Access to computers**

Access to computers, programs, and files is restricted to authorized users only. Respect for the privacy of others is maintained by not intentionally seeking information about passwords or files belonging to other users, unless explicitly authorized to do so by those users.

§ Academic communities are by nature open and transparent, therefore respect for the spirit of academia should be maintained. The theft, mutilation, abuse of public or private computing resources, violates the nature and spirit of the academic environment. Theft also includes; theft of services. Acts of theft will be referred to the appropriate University authority through the Campus Security.

§ Computer systems, software applications, and other resources are provided for the benefit of the individuals within the University community. Deliberate or suspicious introduction of computer viruses, deletion or removal of software programs or files is a violation of computer usage policies. Acts of this nature will be referred to the appropriate University authority for disposition.

§ Central and network computer access are protected by password security. Protection of computer accounts is accomplished by not divulging one's password to others, by changing one's password frequently, and by deleting unwanted files. If another user should gain access to one's password, the password should be changed immediately.

#### **6.1.2.2 Usage**

§ Computer resources, while widely available, are finite. Common sense regarding shared resources should be exercised. Engaging in deliberately wasteful practices; for example, printing large amounts of unnecessary listings, using the

laser printer as a copy machine, making unnecessary laser printouts (printing after every editing change), or unnecessarily holding a public PC or workstation for a long period of time when other users are waiting for these devices, is to be avoided.

- § Computer connection in the Library is for use by authorized persons only. Activity on these machines is considered to be under the control of an assigned user.
- § No server of any sort may be run on the University network other than those sanctioned by the University, and the policies as ratified by the University. This includes, but is not limited to game servers, Windows Servers, Novell NetWare Servers, or any form of UNIX in a server configuration.
- § Institutionally owned systems may not operate recreational peer-to-peer applications or any peer-to-peer messaging applications that is exploitable due to improper configuration or application weaknesses. Institutionally owned computers and/or privately owned computers, performing institutional business must have up-to-date anti-virus software installed.
- § Services such as DNS, DHCP, BOOTP, WINS, FTP, or HTTP may be operated only within the guidelines and information technology policies of the University.
- § The University maintains public access computing labs for use by the faculty, the students, and staff only. Proper use of public computer laboratory facilities is expected. Proper use follows the same standards of common sense and courtesy that govern the use of other public University facilities. Anyone engaged in an activity or use of the facility which hampers or interferes with the ability of others to do their work may be asked to quit the activity and/or leave the facility. Examples include loud conversation, disruptive behavior, excessive computer volume or display of pornographic, offensive or obscene materials.
- § Electronic mail (e-mail) is a resource widely distributed and supported on the campus. Electronic mail is to be used for appropriate educational, research, and administrative purposes only. It is a violation of the computing policies of the University to start or forward chain letters which has no relevance to the university activities. This behavior is also in violation of most network policies. In addition, University policy prohibits users from sending threatening, obscene, or harassing messages to other users. University email services should not be

used for communicating greetings or forwarding any email other than that of academic interest.

- § It is the policy and practice of the University to respect the copyright protection given to software owners. Therefore, it is against the policy for any student, faculty, or staff member to copy or reproduce any licensed software or other copyrighted material on University computer equipment except as expressly permitted by license. Appropriate laws and copyrights are to be respected. Requests for the duplication or installation of software will not be honored without proof of license or proof of purchase.
- § Users requesting access to the University computing resources will be required to sign a statement on the appropriate user account request form indicating that they have read, understood, and agreed to abide by these guidelines.

## **6.2 Library**

The vision of the Library is to support the RAKMHSU by establishing a knowledge hub to enable access to information resources of all kinds and to provide innovative, responsive and effective services to meet the changing needs of the academic community. The Library has books and journals related to medical, dental, pharmacy, nursing and general education courses, apart from books on general interests.

The Library plays a proactive role to ensure that the information resources are acquired and organized to meet the present and future needs of its users. The Library utilizes information technology extensively to ensure that resources are accessible at all times. It has a hybrid collection of printed as well as electronic resources which include books, journals, databases, audio-visuals, CDs/DVDs, e-books, and e-journals. The Librarian shall provide orientation to all new students regarding uses of the Library.

The Central Library is situated on the second floor of the RAKMHSU building. There are two further Satellite Libraries, one in Saqr Hospital and the other in Obaidallah Hospital. The Satellite Libraries cater to RAKMHSU clinical students and Clinical Adjunct Faculty. All library facilities are available in the Central Library. The Satellite Libraries provide books and journals in clinical specialties and all E-resources available from the Central Library. Books and journals in the Satellite Library are for reference only and may not be borrowed.

### 6.3 Library Resources

#### Books and Print Journals

The library is equipped with at least ten copies of each recommended textbook and two copies of each reference book for each course offered by the University. As at present there are nearly 6500 titles and over 12400 books available.

In addition the library subscribes to 103 national and international print journals.

The table below gives a summary of the number of books and journals in each field of study

<b>Program</b>	<b>No. of books</b>	<b>No. of Titles</b>
Medical	7365	3897
Pharmacy	1372	627
Dental	536	266
Nursing	1872	739
General and General Education	1263	941
<b>Total</b>	<b>12408</b>	<b>6470</b>

<b>Print Journals</b>	<b>No of Titles</b>
Medical	51
Dental	10
Pharmacy	21
Nursing	21
<b>Total</b>	<b>103</b>

#### **E-Resources:**

##### **(a) ProQuest Medical Library™ (PQML)**

ProQuest Medical Library: RAKMHSU Library also offers its readers the ProQuest Medical Library (PQML) medical database. This is one of the most comprehensive sources of e-journals with a collection of more than one thousand full text e-journals from major medical publishers, with coverage dating from 1987, and includes charts, diagrams, graphs, tables, photos and other graphical elements essential in medical research.

##### **(b) Micromedex Healthcare Series:**

This is a clinical decision support solution that helps physicians, nurses and pharmacists improve clinical decision making by reducing medication errors, enhancing disease and condition management, and thereby improving patient care.

The Library has subscribed three modules; **DRUGDEX**, **DISEASEDEX**, and **DRUG REAX** as on line for the benefit of students, researchers and faculty members.

**(c) Exam Master Online Database:**

Exam Master® provides high quality, web-based exam preparation systems for medicine, nursing, pharmacy, physician assistant, and the health sciences.

Coverage:

SNo	Subject Coverage	No of Questions
1	Medical Subjects (USMLE) Step 1, 2, 3	11,400 +
2	Pharmacy Review (NAPLEX)	1,575 +
3	Nursing Review (NCLEX)	3,800 +
4	Dental Review (NBDE) Part 1	2,150 +

**Features of Exam Master Online Database include:**

- provides access to a huge collection of medical & health sciences question bank containing nearly 19000 questions
- simulate the actual board exam experience
- provides questions & answers with explanations which help them in self analysis and students can access the questions in both test/study modes for better practice.
- faculty/administrators may add their own questions with existing questions and circulate among the group of students.

**6.4 Circulation Policy**

Students are allowed to borrow the resources as per the following details:

Resources	Nos	Duration
Books	2	14 Days
Course books (Text books)	2	14 Days
Course Books (Reference Books)	-	Reference only
Magazines/Journals	2	3 days for faculty only
AV Resources (Book companion CDs & Floppies)	-	Reference only
AV Resources (CD/DVDs/Video Cassette)	-	Reference only

**6.4.1 Reservation**

§ Resources can be reserved only when they are on loan.

§ The availability of the reserved item would be informed through e-mail.

§ The reserved resource should be collected from the library within 1 working day after intimation, otherwise the reservation stands cancelled.

#### **6.4.2 Return**

§ Books should be returned on or before the due date mentioned in the due date slip.

§ Reminders would be sent to the user accordingly.

#### **6.4.3 Renewal**

§ Books can be renewed twice each time for 14 days.

§ Resources cannot be renewed if there is any reservation against that particular item.

#### **6.4.4 Fines**

Any borrower failing to renew or return the borrowed material by the due date, shall be liable to pay a fine calculated on the following scale:

Books	:	AED 1 per day
Text Books	:	AED 2 per day
Recalled Items	:	AED 2 per day

#### **6.4.5 Lost/Damaged Resources**

In the event of any loss to library property, the lost property will be replaced with a new one and the student/s responsible for such loss will have to bear/share the replacement cost as the case may be.

### **6.5 Computational Services in Library**

Computers in the library provide access to intranet, internet, online resources, library website and catalog. No games, chatting, music, video, and huge downloads are allowed on any computer placed inside the library. Some facilities may cost as follows:

§ Printing on an A4 page costs 25 fils and on A3 costs, 50 fils.

§ Photocopying on an A4 page costs 25 fils and on A3 page costs 50 fils.

§ Cost will be charged from Student's Multi Purpose ID Card. This Card can be recharged through University's Account Office with minimum amount of AED 50/-.

### **6.5.1 Copyright Policy**

Copyright is a serious matter and any failure to observe these rules may expose the student to liability. RAKMHSU reserves the right to take an appropriate action against those members who violate these rules.

### **6.5.2 Limitations for Copying**

The Library reserves the right to refuse to make any copy of any work for the students as well as prohibiting them from making copies of any work from the collection as it deems fit.

The following limits on the amount of any work to be copied will be strictly observed:

- § Published Books (of at least 10 pages): Not more than one chapter, or not more than 10% of the total number of pages.
- § Periodicals: Not more than one complete article.
- § A copy of an unpublished RAKMHSU project work may only be supplied to the user who satisfies the Librarian that the copy is required for the purpose of research or private study only.
- § Electronic Materials: Not more than one chapter of the work or not more than 10% of the number of pages thereof (or not more than 10% of the number of bytes thereof where the work is not divided into pages) whichever is more.

## **6.6 Rules for the Library Users**

- § Silence must be observed at all times inside the Library.
- § Use of cell phones, music players and game consoles are strictly prohibited inside the Library.
- § Bags and personal things must be placed on the shelves outside the Library.
- § Books must be placed on the reading tables after using them. Please do not try reshelv them.
- § To borrow any library resource, students should provide their identification card.
- § Borrowed materials should be returned promptly.
- § Eating/Drinking in the library is prohibited.
- § The computers may be used only by a single user at a time.

## **6.7 Working Hours**

### **6.7.1 Central Library**

- § Sunday to Thursday: 08:30 am – 09:30 pm
- § Saturday: 09.00 am – 02:00 pm

§ Friday: Closed

### 6.7.2 Satellite libraries

Saqr Hospital Library	Obaidallah Hospital Library
Sunday to Thursday: 8:30am – 2:30pm Friday & Saturday - Closed	Sunday to Thursday: 8:30am – 1:30pm Friday & Saturday - Closed

The Library is closed on all UAE national holidays and official University holidays.

### 6.8 Assistance to Users

The Librarian and the Library Assistants shall be available to answer any questions that staff and students have, either through personal meetings or through email. Students are encouraged to use their Corporate Email IDs and Library OPAC for communication.

#### 6.8.1 Instructional Support

The Library provides advice, individualized instructions and workshops to students on information sources and how to find the information. This shall normally be arranged with the faculty concerned.

### 6.9 Procedures for Suggestions/Complaints

Suggestions/Complaints Book is available in the Library. It can be used:

- § To communicate problems pertaining to Library.
- § To make comments about Library services and suggestions for any improvement.
- § To suggest items for the Library to add to its collection.

Suggestions and complaints can also be sent by e-mail which will be forwarded to the Librarian to address them.

The Library reserves the right to modify these rules from time to time. The Library notice board will display the revised version of the rules.

## **7. Admission Regulations**

### **7.1 University General Admission Requirements**

RAK-MHSU admission policy is based on student academic achievement in the undergraduate program, regardless of gender, race, color, religion, age or national origin.

All documents presented by the applicant for admission purposes shall become the property of RAK-MHSU and will not be returned, other than any original documents. If, for any reason, documents presented by the applicant are deemed fraudulent, RAK-MHSU reserves the right to expel the student without refund, or prior notice at any time during the study period.

### **7.2 Academic and Practice Requirements**

Admissions to master programs of RAK-MHSU shall be competitive and will be based on the scores in the corresponding RAKMHSU Bachelors program or its equivalent. Course by course review of the baccalaureate transcript will be done for students applying from other universities besides RAKMHSU to check whether prerequisite courses were completed in the baccalaureate program.

Minimum Eligibility for Masters:

- Minimum CGPA (Cumulative Grade Point Average) of 3.0 on a 4.0 scale in BPharm / BSN Program of RAK-MHSU or their equivalent undergraduate program in the required discipline.

Additional Criteria for Master's in Nursing:

- Registered Nurse Licensure from the country of origin;
- Two years working experience in the area of specialty

### **7.3 Proficiency in English Requirements**

(a) Proficiency in English language equivalent to a TOEFL score of 550 in paper based, 213 in computer based, 79 on Internet based, or its equivalent in a standardized test recognized by the Commission, such as IELTS score of 6.0. This will be common for all the health sciences programs. The students may appear for a TOEFL test in their country of origin or in any recognized centre in UAE.

RAK-MHSU runs English language programs through its English Language Centre and is approved to conduct Institutional TOEFL. Any student who wishes to enroll in any of the RAKMHSU programs, but could not appear for TOEFL in his/her own country, can benefit with the services of the English Language Centre. The grades awarded in the Institutional TOEFL conducted at any place other than RAK-MHSU are not acceptable for admission to RAK-MHSU Master's programs.

(b) Exceptions to the Proficiency in English requirements

- A native speaker of English who has completed his/her undergraduate education in an English-medium institution and in a country where English is the official language;
- An applicant with an undergraduate qualification from an English-medium institution who can provide evidence of acquiring a minimum TOEFL score of 500 on the Paper-Based test, or its equivalent on another standardized test approved by the Commission, at the time of admission to his/her undergraduate program.

**7.4 Conditional Admission to Master's Programs:**

A student with a recognized baccalaureate degree with the minimum CGPA of 3.0 on a 4.0 scale, and a TOEFL score of at least 530 (197 CBT, 71 iBT) or its equivalent on another standardized test approved by the Commission, may be admitted conditionally to a Master's Program. Such a student must meet the following requirement during the period of conditional admission or be subject to dismissal:

- Must achieve a TOEFL Score of 550, or equivalent, by the end of the student's first semester of study.

A student with a recognized baccalaureate degree with a CGPA between 2.75 – 2.99 on a 4.0 scale, or its established equivalent, who meets the English language competency requirements in Section 3 above, may be admitted conditionally to a Master's program. Such a student must meet the following requirement during the period of conditional admission or be subject to academic dismissal.

- Must achieve a minimum overall grade point average of 3.0 on a 4.0 scale, or its established equivalent, in the credit bearing courses studied in the first semester of the Master's program.

## **7.5 Application Procedure**

The admission procedure for the Post graduate programs with relevant dates shall be announced in the leading national/international newspapers, and on the RAKMHSU website.

Each applicant must complete an application form, on the University website ([www.rakmhsu.com](http://www.rakmhsu.com)). This form must be submitted on or before the dates announced by the University as per the admission schedule, either in person, by post, or online through University website. Applications submitted after the due date will not be accepted. Individual candidate will be informed about his/her selection.

The following original documents are required at the time of admission:

- § Transcript of college leaving certificate issued by the college and authenticated by the relevant agency/board/Ministry;
- § Original TOEFL/IELTS certificates (not more than two years old, and shall not be of institutional TOEFL other than the RAKMHSU TOEFL Centre).
- § Birth certificate / proof of date of birth;
- § Conduct and character certificate to be obtained on the college letter head. No other certificate in lieu of this will be accepted;
- § Ten recent and identical passport size colour photographs and one stamp size photograph;
- § Copy of the passport; (needs original in case if the candidate seeks to obtain the student visa)
- § Copy of the visa; in case if the student is already a resident of UAE

All these documents will constitute a Student File and rests with the Office of Admissions, in a joint agreement between the University and the student to maintain confidentiality. Student file is the property of the University but may be released to the student upon a written request to the Office of Admissions, for any valid reason.

*Note: In the event of submission of any fraudulent marks card, incorrect or untrue information, or suppression or distortion of any fact in any of the documents, admission is liable to be cancelled without any refund of fees, at anytime during the period of study at RAKMHSU.*

## **7.6 Admission as a Transfer Student**

RAKMHSU considers for admission students as internal transfers (from one program to another), or from other universities/colleges. The candidate requesting the

transfer from an accredited university shall submit the application to the Office of the Admissions & Registration with the following:

- a) Transfer application form duly completed
- b) Transfer application processing fee of AED 500/-
- c) Supporting documents
  - i) A cover letter from the applicant detailing the reasons for the request of transfer to RAK-MHSU and how the transfer would be of benefit.
  - ii) A 'no objection for transfer' certificate from the applicant's current institution.
  - iii) The official up -to-date academic transcript from the applicant's current university with an explanation of the grading system. If the original transcript is not in English an official English translation is to be provided.
  - iv) Copy of the course content of courses for which the student wishes to claim the credits.
  - v) Score of the most recent TOEFL/IELTS.
  - vi) 10 recent and identical passport size color photographs.
  - vii) Copy of passport valid for at least one year.
  - viii) Document showing proof of the institution's accreditation/ recognition from the respective ministry / government if the institution is outside UAE.

### **7.6.1 Transfer Policy**

Students may be accepted from other colleges/universities after the first semester so that not more than 25% of the credits required for graduation completed at other college or university. The admission is granted after evaluation on an individual basis. The following points will be taken into consideration:

- § The course should have been undertaken as full time program.
- § At least 75% of the total credit hours of the respective program should be carried out in RAKMHSU.
- § The student's general academic ability will be reviewed based upon careful examination of academic history, including factors such as the grade-point average, the selectivity of the University attended, the difficulty of the curriculum and the credit hours, and the required examinations of the respective semesters, if necessary.
- § Students must be in good academic standing at their previous University with a GPA of at least 3.00 (70%) and above, or must have earned a 'C' grade, with no failing grades except when the entire course has been successfully repeated.

Students will be notified of the outcome of their request within ten working days from the date of submission of their application.

*No student who has been dismissed from any university will be eligible for admission as a transfer candidate, unless his/her former Dean submits a letter addressed to the Vice Chancellor confirming that the student has been reinstated, is in good standing, and is eligible for transfer and admission/ readmission.*

## **7.7 Registration**

All the students admitted to the various Master programs of the University must register at the beginning of the each semester. The Admission Office/Office of the Registration will inform each student of the time and place of registration, in advance of the registration period. A student, who fails to complete the registration process on the given date, will not be entitled to attend the lectures and will be deprived of the privileges of the University. Registration after the due date can be done with the permission of the Dean, Registration & Examination, and after paying the late registration fee.

## **7.8 Credit Hours**

At RAKMHSU, the courses are calculated in terms of credit hours. Each course carries certain number of credits that are awarded after the successful completion of that course. One credit hour equals to one hour of lecture, or two hours of tutorial or laboratory work, two hours of Problem Based Learning/Case Based Learning, two hours of thesis related lab/library work or four hours of clinical teaching in the hospital, per week, for 16 weeks.

## **7.9 Medium of instruction and examination**

The medium of instruction and examination for all the programs shall be English.

## **7.10 The Orientation Program**

On admission to RAKMHSU, the student must attend an Orientation Program. The Orientation Program is designed to familiarize the students with several aspects of the University life in general, and with their College in particular, including the academic activities and the University policies and procedures. In addition, the student will receive important information about the University student services, learning resources, job opportunities, financial aid, student activities, career counseling, housing, etc. The use of the library and its services are also included as a part of the orientation program.

## **7.11 Academic Advisor**

Each student after registering for the respective program is assigned an Academic Advisor who will be a full time faculty member. The academic advisor assists the

student in planning class schedules, reviewing the curriculum and checking the progress towards completing post graduation requirements. In addition, they will also guide the students in studying habits and problems in learning, attendance and academic performance, and overcoming personal problems, health problems, or any other stressful situations. The detailed guidelines regarding academic advising will be provided to the student by the Academic Advisor.

### **7.12 Assistance to students with special needs**

RAKMHSU provides the physical facilities to students with special needs.

### **7.13 Rules of Attendance**

- § One hundred percent attendance separately in theory and practical classes is a requirement to appear for continuous assessment and also in the end-semester examinations. However, where a student's attendance falls less than 100%, he/she may be allowed to appear for the examination with the permission of the Dean, subject to the condition that the overall attendance shall not be less than 75%, inclusive of sick leave, or any other reason for absence. This will also depend on the good academic performance of the student. In such a situation, the student must apply to his/her Department Chairperson who forwards his/her recommendation to the respective College Dean.
- § The Chairperson and faculty members of each department ensure compliance with the rules of attendance, through daily attendance and monitoring procedures.
- § Students who represent the university for any curricular, co-curricular or cultural activities, or at any inter-university program, shall obtain prior permission from the respective Department Chairperson before availing the absence from the classes.
- § Granting of leave when the student is sick, or for any other absence, does not mean that a "present" is marked for "absent".
- § In any case no student will be allowed to write the exams if the attendance is less than 75%.

## 8. Financial Information

The Board of Trustees fixes the fee and they reserve the right to amend or add to the regulations concerning fee and the method of payment, and to make such changes applicable to present, as well as to future students. The following is the fee structure for various programs at RAKMHSU:

### 8.1 Tuition and other Fees

#### i) Payments to be made at the time of admission :

a) Application Fee	AED 250/-
b) Admission Fee (including Registration Fee)	AED 2,000/-
c) Late Registration Fee	AED 500/-
d) Lab Caution Deposit (refundable)	AED 2,000/-
e) Library Deposit (refundable)	AED 1,000/-
f) Alumni Association Life Member Fee (one time)	AED 100/-
g) Examination Fee (per course, per appearance)	AED 200/-

#### ii) Tuition Fee (payable semester wise) :

(Fees shown are per semester)\*

a) Master of Science in Pharmacy Practice	AED 30,000/-
b) Master of Science in Pharmacy Practice	AED 30,000/-
c) Master of Science in Nursing	AED 30,000/-

\* Fee concession will be available for the pioneer batches of each program

iii) Examination Fees (per course per semester)	AED 200/-
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#### iv) Other Fees :

a) Issue of Duplicate Hall Ticket	AED 50/-
b) Additional Transcript Copy	AED 25/-
c) Replacement of Identity Card	AED 100/-
d) Certificate "To Whom It May Concern"	AED 25/-
e) Certificate of Status Fee	AED 25/-
f) Health Insurance Fee	AED 1,600/-
g) Uniform fee for BSc (Nursing)	AED 800/-
h) Uniform fee for RN-BSN Bridge Program	AED 200/-

i) Uniform fee for MSN Program AED 200/-

**v) Library**

- a) Library Book Fine AED 1/- per day
- b) Library Text Book Fine AED 2/- per day
- c) Library Recalled Items AED 2/- per day

**vi) Hostel Fees :**

Students of RAKMHSU are provided hostel facilities in the new Student Residence Facility the Government of Ras Al Khaimah has built in the American University of Ras Al Khaimah (AURAK) Campus. Administration of the hostels is not under the University. However, current information on hostel facilities will be available at the Office of Admissions and Office of Student Affairs.

The current fee structure is shown below (hostel fees are not under the purview of RAKMHSU).

**Fall Semester/ Spring Semester**

Sharing Occupancy Small Studio – per person per semester, inclusive of rental and utilities* charges	AED 5000
Sharing Occupancy Large Studio – per person per semester, inclusive of rental and utilities* charges	AED 6000
Single Occupancy Small Studio – per person per semester, inclusive of rental and utilities* charges	AED 8000
Single Occupancy Large Studio – per person per semester, inclusive of rental and utilities* charges	AED 9000
Reservation fee, Non Refundable – per person*	AED 2500
Security Deposit, Refundable – per person	AED 1000

**Summer Session / Monthly Rental Charges**

Sharing Occupancy Small Studio – per person per month, inclusive of rental and utilities* charges	AED 1200
Sharing Occupancy Large Studio – per person per month, inclusive of rental and utilities* charges	AED 1400
Single Occupancy Small Studio – per person per month, inclusive of rental and utilities* charges	AED 1800
Single Occupancy Large Studio – per person per month, inclusive of rental and utilities* charges	AED 2000
Security Deposit, Refundable – per person	AED 1000

**Daily Rental Charges (Short Stay) for Students Referred by University / Institution**

Sharing Occupancy Small Studio – per person per day, inclusive of rental and utilities* charges	AED 75
Single Occupancy Small Studio – per person per day, inclusive of rental and utilities* charges	AED 150
Security Deposit, Refundable – per person	AED 1000

\* Internet, Basement Car Parking, Electricity, Water and Cleaning



The first year tuition fee and other fee stipulated by the University are to be remitted in two installments; one at the time of admission/registration and another before the commencement of the second semester. The payment of fee for other subsequent semesters shall be as per the time schedule announced by the University from time to time.

From Second Semester onwards, Tuition Fee may be paid in TWO equal installments per semester.

The Tuition Fee for the second semester shall be paid on or before the date of registration for the semester.

Students who opted to pay the Tuition Fee in two installments have to make the first payment on or before the date of registration and by the same day give a post dated cheque for the second installment.

A penalty of Dhs 100 per day upto a maximum of Dhs 500 will be charged for late payment.

#### **8.4 Concession in Tuition Fee**

Merit scholarship: Students who secure a GPA of 3.80 or above in any semester shall be entitled to a concession of Dhs 5000/- which will be adjusted against the following semester tuition fee. Other than the Merit Scholarship students are not eligible for any other concession.

#### **8.5 Penalty for Late Payment of Tuition Fee**

A student, who fails to complete registration, including the payment of all financial obligations to the University, on or before the due date, will be denied privileges of the University. Reinstatement within a week may be obtained, by acquiring the permission from the Dean after full payment of all the financial obligations to the University, including the late payment charges.

#### **8.6 Refund Policy**

Request for refund (tuition fee only) should be made at the Office of the Registration by submitting a written request enclosing with the student's ID Card (original) and

original fee receipt. Refund will be made only after clearance of all the dues, if any, to the University. On approval, the amount shall be refunded as mentioned below:

<b>Refund Request Time</b>	<b>Amount Eligible for Refund</b>
Any time after admission, but before the date of commencement of classes	Total fees received less AED.2,000/-
Within 15 days from the date of commencement of of classes	50% of the total fee received
After 15 days of commencement of classes	No refund

The caution deposit will be refunded either after the completion of the program or whenever the student will be leaving the program, whichever is earlier.

### **8.7 Bank Loan Assistance**

The University will issue a bonafide certificate along with the statement of annual expenditure for the program to enable the student to obtain the maximum educational loan from the banks.

The student is ultimately responsible for resolving all issues involving loan delinquencies, defaults, and/or any other circumstances that would result in the student being ineligible to borrow through any loan program.

### **8.8 Health Insurance**

Health insurance is provided to all students attending RAKMHSU and the insurance fee is collected along with the tuition fee, on or before the scheduled date for the fee payment.

## **9 Students' Affairs**

### **9.1 Students' Rights and Responsibilities**

*Detailed information on students' rights and responsibilities are found in Sections 4 and 5 of the Student Handbook*

The University ensures academic freedom of the students and fosters intellectual development in an atmosphere of active engagement in the educational process, and encourages free discussion, free inquiry and free expression regarding issues within the domain of the course or program are encouraged.

Students are evaluated on the basis of their academic and clinical performance.

Information obtained from students in the course of counseling, teaching or advisory meetings shall be confidential except under exceptional circumstances. Such circumstances include situations where there may be potential harm to another individual, faculty member may be prevented from fulfilling his/her responsibility or when the safety of the society or the reputation and integrity of the University is at stake.

Students have freedom of speech and expression, so long as it does not violate laws of the country, rules, policies and procedures of the University, or adversely affect the function of the University or any member of the university community.

Publications by Official Student Bodies have editorial freedom, but shall be subject to review Faculty Advisors. Posters and other similar written notices must be registered with the Office of the Student Affairs, before it is to be distributed or displayed in locations designated for such purposes.

Students should use information technology in keeping with the regulations of the University.

The students are encouraged to express their views through established channels, on issues of College/University policy and on matters of general interest to the student body.

Official records of students are held in confidence by the University. Students have access to their records by submitting a written request. Student records are available to the Faculty Advisor, Dean, and Department Chairperson on request.

Photo identification cards are issued free of charge to all new students during orientation week. Identification cards must be worn at all times and shown on

request to university authorities. Students should report lost cards to the Office of the Finance and Administration and obtain a replacement, paying a fee.

All health science professionals shall be groomed and dressed in a manner which will help them to attract respect from their patients and the society in general. Detailed dress code for female and male students appears in the Student Handbook.

The University encourages scholarly activities among its faculty and students. These include research and participation in conferences and other scientific meetings. However all such activities should be performed following the regulations of the University.

Students of RAKMHSU are encouraged to participate in various developmental activities. Students will be nominated for various committees such as Library Committee, Academic Advising Committee, IT Services Committee, Grievance Redressal Committee, Sports and Cultural Activities Committee, etc.

## **9.2 Academic Support Services**

*Detailed information is available in Section 6 of the Student Handbook*

The University provides counseling services to help students to overcome obstacles to academic progress, to examine personal and intellectual strengths and weaknesses, and to learn skills which promote personal and intellectual development.

Personality development workshops provide students with opportunities to develop personal management skills to enable them to succeed academically as well as personally. Programs include topics such as managing procrastination, performance anxiety, stress management, communication skills, assertiveness, anger management and building healthy relationships.

The counseling center provides crisis intervention assistance to the students who are experiencing crises which affect their ability to function in the community

RAK-MHSU provides career services to undergraduates and contributes towards making RAKMHSU graduates develop clarity of purpose and appropriate decision-making abilities, so that students will be confident, selective and competitive in managing their careers and further academic pursuits. The University also creates opportunities for students to make contact with prospective employers

### **9.3 Student Support Services**

*Please also refer to Section 7 of the Student Handbook*

**Learning Skills and Tutorial Programs:** The Office of Student Affairs organizes workshops on personality management, time management, test-taking, vocabulary development and stress management.

**Food Services:** The cafeteria is located at the students' center to provide hygienic and cost effective meals and refreshments to the students throughout the weekdays.

**Hostel Facilities:** Government of Ras Al Khaimah has built state-of-the-art Student Residence facility in American University of Ras Al Khaimah (AURAK) Campus, for the benefit of students pursuing higher education in various institutions located in Ras Al Khaimah including RAKMHSU.

**Student Center:** RAKMHSU provides the students with state-of-the-art Student Center with a Table Tennis Hall; and well equipped gymnasium halls. These facilities have been made available separately for male and female students. There is also an activity center, which accommodates some activity-based clubs. A new, spacious Students' Lounge serves as a common room.

**Social and Cultural Activities:** The Office of the Student Affairs organizes implements and supervises all social, cultural and entertainment programs relating to the students.

**Spiritual Facilities:** The University offers separate prayer rooms for men and women.

**Lost and Found:** The Office of the Students Affairs facilitates identification and the return of items lost/found within the University. Proper proof of identity and acknowledgment of receipt are needed for the returned property.

**Parking and Transportation:** The University provides free car parking slots to the students subject to availability. Students should register their vehicles at the Office of the Student Affairs. Parking stickers will be issued for registered vehicles.

RAKMHSU provides transportation in air-conditioned shuttle buses to all students from different locations subject to adequate numbers. These locations include Dubai, Sharjah, and Ajman. For detailed information on transportation, students are advised to contact the Office of the Student Affairs.

Security: The University provides on campus security, regulates the campus traffic and parking system, and is authorized to enforce all related security regulations on a 24 hour basis

Student Health Services: Students are eligible for health services through the health insurance scheme in designated hospitals and clinics. Ras Al Khaimah has many pharmacy outlets which offer a full range of medication for health insurance holders.

#### **9.4 Student Council**

*Please see further information in Section 8 of Student Handbook*

Students Council is elected at the beginning of every academic with a mandate to promote the common interest of students and operate in a manner consistent with the University's mission and code of conduct. One faculty member is nominated by the Vice Chancellor acts as an Advisor to the Student Council.

#### **9.5 University Guide to Student Behavior**

*A detailed account is available in Section 9 of the Student Handbook*

RAKMHSU stands for the human dignity and worth of every person and believes therefore, in values that foster the human respect needed for people to live, work, study and recreate together as a community. In keeping with this philosophy, RAKMHSU has a code of conduct which promotes the well being of individuals and groups who make up the community.

Rules and regulations provide the basis for a reasonably ordered life. The mere observance of rules, however, without the cooperation and personal appropriation of the values they protect, falls short of what RAKMHSU hopes for everyone who is part of the community.

These regulations include policies on student academic integrity and academic honesty. Procedures and policies for disciplinary action are also clearly detailed. .

Student grievance policies and procedures have been formulated to assist students in instances where grievances occur; it is the aim of the University to resolve them amicably and promptly, in a manner that is both fair and equitable to all concerned.

Dismissal of a student for adequate cause: Apart from Academic Dismissal, a student may be dismissed from the university disciplinary reasons. A formal proceeding shall be initiated and followed before such dismissal.

Policy on Sexual Harassment: The University has zero tolerance on sexual harassment of any member of the university community by another.

General welfare: Where grievances concern matters of administration, financial matters, or services available to students, students should initiate a discussion with the appropriate member(s) of staff. Discussion will be within the context of the rules and regulations as set out in University publications. The following procedure will then be followed:

## **10. Academic Regulations, including the grading system and standards for academic progress**

### **10.1 Examination Committee**

The Examination Committee consists of the Vice Chancellor as Chairperson, Dean, Examination as Secretary, and Director, Clinical Education, Deans, Associate Deans and Department Chairpersons of all the Colleges as Members. The Examination Committee determines whether the general requirements for promotion are met by the students. It shall also be responsible for the approval and announcement of examination results.

### **10.2 Time of Examinations**

All end-semester exams will be held at the end of semester, January/February and June/July months of the year. The timings for the Repeat Exams depend on the announcement of the results of these exams, but in general they are conducted within 6 weeks from the announcement of the results.

### **10.3 Requirements for appearing in Examinations**

No student shall be allowed to appear for any examination, if

- § The student secures less than 50% in the continuous assessment(CA);and
- § The student does not fulfill minimum attendance requirement of 75%.

Students scoring less than 50% in CA shall repeat the semester.

### **10.4 Examination Methodology**

At RAKMHSU, the examination/assessment methodology is to assess the student continuously throughout the semester. For this purpose forty percent weightage is given to the end-semester examinations, and sixty percent weightage is given to various assessments spread throughout the semester in the name of "Continuous Assessment".

#### **10.4.1 Continuous Assessment**

The methodology for conducting various continuous assessment components and their respective weightages are as follows:

##### **10.4.1.1 Mid Semester Assessment (total weightage 60% of continuous assessments)**

- There will be only one assessment in the format of the end-semester exam and carries 60% weightage of continuous assessment. The mid-semester assessment shall be an approximately 2 hour examination comprising MCQ and/or RRE
- The Mid Semester Assessment will be conducted on daily basis without any gap. All related OSPE/Practical Exams will be conducted in the respective afternoons.
- There will be no scheduled teaching sessions during the conduct of these assessments.
- 75% attendance is mandatory to appear for Mid Semester Assessment.

- For all students the percentage of attendance will be calculated from the date of eligibility to register till the last class, one week prior to Mid Semester Assessment.
- The Dean of the College will notify the students about the schedule of the mid Semester assessment – including the date, time, and venue.

#### **10.4.1.2 Assignment (total weightage 10% of continuous assessments):**

- **Number of Assignments:** There will be a minimum of 2 assignments per course per semester, and its placement is left to the Course Coordinator.
- **Date of submission:** The faculty shall fix the precise date of submission and once the date is fixed, the faculty must maintain the deadline.
- **Topics:** Different topics can be given to different students or different group of students. The topics for the assignments can be announced at least 2 weeks in advance.
- The form of assignment will depend on the nature of the course and may consist of individual or group work.
- The faculty shall provide the detailed guidelines to the students on the format of the assignment.

#### **10.4.1.3 Seminar (total weightage 15% of continuous assessment)**

There will be at least two seminar sessions during the semester for each course. Its placement is left to course coordinator. Content of the seminar session will be assessed through mid semester assessment and end semester examination. Only the process to be evaluated during seminar assessment sessions taking into account personal attributes, use of audio visual aids, presentation and feedback (questions and answers)

There will be no repeat seminar sessions

- **Number of Seminars:** There shall be a minimum of 2 Seminars per semester, and its placement is left to the Course Coordinator.
- The average of best two Seminars to be taken for final assessments.
- **Absence in Seminar:** There shall not be any 'remedial' or 'repeat' for the Seminar.
- **Timings/Duration:** Seminar to be conducted during the regular class hour for that particular course, always with prior announcement.
- **Format:** The assessment may be of MCQ/RRE format. 10% questions from seminar content to be included in mid semester assessment & end semester assessment.

#### **10.4.1.4 PBL/CBL (total weightage 15% of continuous assessments):**

- There will be 2-4 PBL assessment sessions in and their placement is left to the Course Coordinator.
- Contents of PBL sessions to be assessed through Seminar, Mid Semester and End Semester Examinations and only the process to be evaluated during the PBL assessment sessions.
- As a part of training the student will do the peer and self review, but this will not be added to the continuous assessment. There will not be any repeat PBL.
- The PBL has to be integrated and the marks awarded will be taken into all the integrated courses equally (for e.g., if a student gets 10 out of 15 marks in an integrated PBL of Anatomy, Physiology and Biochemistry, he/she will get 10 out of 15 in all the three individual courses).

- When integrated PBL is not possible, individual course PBL can be planned. However, this will be solely at the discretion of the College Dean.
- For courses not amenable to the conduct of PBL, the allocated marks will be distributed between assignments and seminars.

At the end of all the assessments, the College Dean shall submit the raw marks for all the evaluation components (Midterm, Seminar, Assignment, PBL, etc), to the Office of Examinations in the given format after due review/verification if any, by the students

All continuous evaluation reports shall be properly signed by faculty/Chairpersons before transmitted to the Office of Examinations from the respective College Deans in the given formats. The Office of Examinations may return the grades for departmental clarification or reconsideration if any discrepancy or inconsistency appears.

#### **10.4.1.5 Continuous Assessment in Practical/Clinical**

In courses with practical credit hours, practical skills will be assessed using a variety of assessment tools.

The tools used, relative contributions and frequency will depend on the nature of the course. This information will be available from the faculty in charge of each course

#### **10.4.1.6 Remedial Exam**

As mentioned, there will not be any remedial for assignment, Seminar and PBL, but a remedial exam of mid semester assessment can be conducted for the following students:

- (i) Any student who wasn't allowed to appear for mid semester assessment because of lack of attendance but achieved 75% and above by the time when remedial mid semester assessment is planned
- (ii) Any student whose continuous assessment marks are less than 70%, but attendance is 75% and above by the time when the remedial mid semester assessment is conducted.
- (iii) Any student who was absent in mid semester assessment with a reason acceptable to the Chairperson.

The remedial mid semester assessment to be conducted before the end of semester with the portion covered till that date.

There shall not be any second remedial assessment for any reason.

Between the actual and the remedial, the best of two raw marks to be taken for final computation.

Students securing 70% or above in continuous assessment are not allowed for remedial exam.

#### **10.4.1.7 End Semester Examinations**

There will be an end semester exam at the end of each semester for theory and OSPE/ESPE/OSCE for each course. The average of the grade point awarded in mid – semester – theory and the end-semester – theory, will be taken as the grade point for that semester (theory).

Repeat I exams, either for odd semester or for even semester, will be conducted for the students who could not obtain a minimum of 3.0 as the average grade point, within 3 weeks from the date of declaration of results.

A student is expected to score a minimum of GPA 3.0 in each of the components separately in theory and OSPE/ESPE. A student who fails in theory or OSPE/ESPE will appear for the respective component only for Repeat I and Repeat II exams.

#### **10.4.1.8 Repeat Exam**

Any student who is stopped to appear for any end-semester examination due to shortage of attendance, he/she shall write a test to be qualified to appear for Repeat Exams, and based on this evaluation only the respective Chairpersons shall recommend the student to appear for **Repeat I** within 6 weeks of announcement of results. This test will also be considered to make up his/her continuous assessment written tests for any shortage (only in the mid semester component), if the grade point of the student in continuous assessment is below 3.0.

#### **10.4.1.9 Progression**

If a student does not secure the minimum passing grade in more than two courses of Sem I, he/she shall NOT be permitted to proceed to Sem II. Similarly if a student does not secure the minimum passing grade in more than two courses of Sem II, he/she shall NOT be permitted to proceed to Sem III. Any failed course carried forward need to be passed by the end of the following semester.

Students who fail in more than two courses in a semester shall repeat the semester and retake the failed courses.

### **10.5 Assessment Methods include the following types (not all are used in each program)**

#### **A. Theory**

- § Multiple Choice Questions (MCQ)
- § Restricted Response Essay (RRE)

#### **B. Active Learning Component**

- § Problem Based Learning (PBL)
- § Case Based Learning (CBL)
- § Seminar

#### **C. Practical/Clinical**

- § Laboratory report
- § Laboratory result
- § Log book
- § Case studies
- § Case presentations
- § Objective Structures Practical Examination (OSPE)
- § End Semester Practical Examination (ESPE)
- § Objective Structured Clinical Examination (OSCE)

§ Viva

### **E. Dissertation**

§ Thesis report

§ Seminar

§ Viva

### **Weightage distribution for Theory and Practical/Clinical components**

Theory and Laboratory/Clinical components will contribute equally to overall course marks.

### **10.6 Academic Dismissal**

Academic dismissal is the involuntary separation of a student from the University, when a student does not fulfill the attendance requirement of 75% in a semester or could not achieve a minimum GPA of 3.0, even after repeating a semester.

### **10.7 Appeal procedure to revoke Academic Dismissal**

A student may appeal for his Academic Dismissal by submitting a written request within five working days from the time the Academic Dismissal letter was signed and mailed to the Office of the Examination.

This written request must state the basis for appeal that would warrant modification of the student's status. The Office of Examination may call for an Examination Committee Meeting who in turn shall review and reevaluate the matter within 5 working days after receipt of the student's request. The Office of Examination will communicate the final decision to the student. During the interim period of appeal after the dismissal, the student is prohibited from attending any activity in the College/University.

### **10.8 Hall Ticket**

The following rules are applicable regarding hall tickets:

- The Office of Examination issues the Hall Tickets at least one week before the commencement of the examination to all the students, for the courses for which the student is eligible to write the exams.
- Due to attendance shortage or poor academic performance in continuous assessment, the student might be barred from writing exams of such courses, and in such a case those courses will not be printed on the Hall Ticket.
- Hall tickets must be brought to the examination hall everyday and presented to the invigilator prior to the examination.
- No faxed copies/photocopies of the hall tickets will be accepted by the faculty.
- A duplicate Hall Ticket will be issued only by the Office of Examination upon payment of required fee.

### **10.9 Dishonesty in Examinations**

All academic work and materials submitted for assessment must be the work of the student. Cheating is not limited to copying from others' work and giving unauthorized assistance, but it also includes the use of devices or procedures for the purpose of achieving false scores in examinations. Students are

prohibited from submitting any material prepared by or purchased from another person or company.

Students are expected to take themselves seriously and act responsibly. If the student violates the rules of the examination, it will result in penalty ranging from a warning to dismissal from the University.

A faculty member who notices the cheating shall report the incident with full particulars to the respective Chief Superintendent, who will recommend the penalty to the Office of the Examination. The decision of the Vice Chancellor will be final.

#### **10.10 Withdrawals**

If a student with academic deficiency desires a withdrawal, he/she may apply for the same using the withdrawal form available in the Office of the Examination.

#### **10.11 Postponement of Study/Leave of Absence**

If a student wishes to postpone his/her study for any reason, she/he must submit a request letter to the Office of the Examination. The period of postponement will be up to a maximum of one academic year during the entire period of study. The postponement period will be considered and calculated as part of the maximum study time limitation for the program, from the date of registration.

- § Leave of absence for personal and non-medical reasons are processed by the Dean of the respective Colleges upon receipt of a written request from the student.
- § Leave of absence may be granted to students, who are in good academic standing (GPA > 3.0).
- § For medical leave of absence, students must proceed through the Dean of the College to the Office of the Examination.
- § Granting of medical leave will not entitle the student to appear for any exam if the attendance is less than 75%.

#### **10.12 Course Grading System**

Students shall be assigned grades (letters) for each course in which they are examined. The letter reflects the student's achievement in the course. The minimum grade for passing a course is letter "C" and grades are written in letters according to the following table:

Description	Grades	Points	Percentage
Outstanding	A+	4.0	<b>95-100</b>
Excellent	A	3.8	<b>90-94</b>
Very Good	B+	3.6	<b>85-89</b>
Good	B	3.4	<b>80-84</b>
Satisfactory	C+	3.2	<b>75-79</b>
Pass	C	3.0	<b>70-74</b>
Fail	F	-	<b>&lt; 70</b>

#### **10.13 Grade Point Average**

Grade Point Average “GPA” reflects the student’s achievements in an academic year; while Cumulative Grade Point Average “CGPA” reflects the student’s achievements in the entire program.

The GPA is calculated by multiplying the grade of each course by the number of its credit hours, and dividing the total by the number of total credit hours taken during the semester. The CGPA is the average of all the GPA of a given course during the entire program. Both GPA and CGPA are rounded to the nearest two decimal units.

#### **10.14 Grade Appeals**

A student may appeal against a grade of the end-semester examination within five working days from the announcement of the results of the end-semester examination by forwarding a written request to the Office of the Examination. The Office of the Examination shall call the respective Chairperson, and if necessary the Examination Committee Meeting, to review the examination paper(s). Any change of grade will be informed to the student by the Office of the Examination.

#### **10.15 Change in Grade**

The following procedure will be followed by all faculty members to change a student’s grade that has already been submitted to the Office of the Examination.

The request for the change of grade, together with adequate explanation, will be submitted by the faculty member concerned to his/her Department Chairperson.

If the Department Chairperson approves the request for change of grade, the request will be submitted to the Dean of the College.

If the request is approved by the Dean of the College, the change of grade will be communicated by the Office of the Examination, to make the appropriate change(s) on the student’s record and notify the student and the faculty member.

In case if a student wishes to see his/her response sheets, they can do so by paying a prescribed fee. The papers can be seen only in the presence of the Manager, Examination or his/her appointee.

All end semester examination papers will be available to all students to review free of cost on the following day of the last exam.

#### **10.16 Announcing of Grades**

The Grades will be announced as per the dates mentioned in the Academic Calendar for a given semester. Students wish to receive their grades electronically, may submit a request letter to the Office of the Examination and it will be done without any extra cost.

#### **10.17 Graduation**

To be eligible for graduation, the student must satisfy each of the following requirements:

- § Must have satisfactorily completed the program within the maximum study time limitation of respective programs (excluding internship wherever applicable) from

the date of registration. This period is four years for full time study and six years for part time study.

- § Must have met the attendance requirement of 75% separately for theory and practical classes in each semester.
- § Must have achieved a CGPA of more than 3.0.
- § Must have successfully completed the thesis
- § Must have completed all required coursework in the curriculum
- § Must have earned at least 75% of total credits required for the program at RAKMHSU.
- § The student becomes a degree candidate when the Department Chairperson, on the request of the faculty advisor, certifies that the student has completed the program and the University requirements for graduation and, consequently, recommends him/her to the Academic Council through the Dean for the conferring of the appropriate degree.
- § Students must have met all financial obligations to the University within the time specified. The certificate for graduation and transcripts will be withheld if there are any dues to the university.
- § In order to qualify for graduation the student must earn the following credits for the respective programs:

Master of Science in Pharmacy Practice	62
Master of Science in Pharmaceutical Chemistry	62
Master of Science in Nursing	50

#### **10.18 Academic Honors**

**Academic Honoring of the Bachelor Degree is classified as follows:**

- § CGPA 3.8 or higher : Master with Distinction
- § CGPA 3.5 – 3.79 : Master with Merit
- § CGPA 3.0 – 3.49 : Pass

The Office of Examinations issues the Students Academic Honor List at the end of each academic year. To be placed on the Students Academic Honor List, a student must:

- § Have registered for the stipulated credits per semester, and have received no failing grades.
- § Have at least a GPA of 3.8 or higher.
- § Should have passed all course at the main University Examinations.
- § Have no disciplinary action against him/her.

#### **10.19 Transcripts**

A transcript is a copy of a student's permanent academic record, duly certified by the Office of the Examination, and bearing the embossed seal of the University and is issued at the completion of program. It contains the following information:

- § A listing of all courses registered and the grades achieved.
  - § A statement of the degree attained including the date of graduation.
- Student may order transcripts of their academic record at the Office of the Examination upon written request along with the prescribed fee. However, if a student wants to know his/her progress in between the program, an unofficial transcript (without the seal of the University) may also be issued.

**10.20 Award of Degree**

Degree certificates shall be processed by the Office of Examinations. To avail degree certificate, the student must satisfy graduation requirements mentioned above. Degree certificates shall be issued during Convocation which will be held annually.

## **11. Master of Science in Pharmacy Practice**

**11.1** Master of Science in the specialization of Pharmacy practice comprises of a two year program with first year for course work in Pharmacy practice and the second year for dissertation work.

### **11.2 Goals:**

The curriculum has been framed to provide patient focused learning opportunities enabling the students to get the required clinical knowledge and learn the basic skills relevant to health for a better patient care in a hospital and community set up.

At the end of two year curriculum, the students shall be able to :

1. Prepare for evidence based pharmacy practice in the changing health care environment of the 21<sup>st</sup> century.
2. Develop a mastery of the knowledge base in pharmaceutical and clinical sciences essential to fulfill all of the roles of pharmacy practitioners.
3. Demonstrate skills in the technical, social and behavioral aspects of pharmacy, including communication skills.
4. Illustrate the integration of knowledge and skills in the optimization of medication management for a wide range of people.
5. Acquire the skills and attitudes necessary for a commitment to life long learning including skills to retrieve, critically appraise, disseminate and apply new knowledge
6. Develop a professional and compassionate approach to critically evaluate and assess the health care.

### **11.3 Objectives**

#### **11.3.1 Knowledge**

At the end of the program, students shall be able to:

1. Demonstrate sufficient knowledge and scientific information regarding pharmacology, therapeutics and pharmacy practice in a clinical situation.
2. Develop special knowledge of pharmaceutical care with reference to community, hospital and clinical pharmacy settings.
3. Adequate knowledge of practical aspects of Technical, social and behavioral aspects of pharmacy including communication skills.
4. Recognize the scientific basis of health, disease and treatment pattern in different medical conditions.
5. Develop adequate knowledge of clinical studies for patient counseling

emphasizing on patient medications.

6. Demonstrate adequate knowledge of pharmacist's role in health care and illness prevention and ability to promote this role.

### **11.3.2 Skills**

At the end of the program, the students shall be able to:-

1. Provide unbiased drug information to the clinicians, on Adverse Drug Reactions (ADRs), required interventions and effective patient medication counseling to the patients.
2. Evaluate the patient's problems and formulate accurate hypotheses to serve as the basis for making choice of drugs and treatment decisions by the clinicians.
3. Educate patients about their health problems and to motivate them to adopt health promoting life style modifications.
4. Work effectively as part of the health care team for better patient care by optimizing drug therapy and minimizing ADRs.

### **11.3.3 Attitudes**

At the end of the program, the students shall be able to:

1. Follow the ethical principles and method of learning and improvement that involves investigation and evaluation of patient care, appraisal and assimilation of scientific evidence and improvements.
2. Apply the current knowledge of Pharmacy in the best interest of patients and the community.
3. Maintain a high standard of professional ethics in discharging professional duties and providing pharmaceutical care.
4. Be a willing learner so as to continuously upgrade professional information and be conversant with latest advances in Pharmacy field to serve the patient and community better.

### **11.4 Semester wise courses**

In the first semester students will be taught courses such as Advanced Pharmacotherapeutics -I, Patient data analysis, Advanced hospital Pharmacy and Modern community pharmacy.

In the second semester the students will be exposed to courses including Advanced Pharmacotherapeutics -II, Clinical Pharmacy-, Clinical Pharmacokinetics & Clinical Toxicology and Drug Discovery, Development & Research.

In the second year (3<sup>rd</sup> & 4<sup>th</sup> Sem), students will be given the area of pharmacy practice to choose the topic for their dissertation work. At the end of the second year they are required to submit their dissertation for evaluation.

### **11.5 Instructional Methods Based on the Objectives**

RAKMHSU is committed to being responsive to students' needs and preparing students to assume future societal leadership roles to meet political, economic, social and technological challenges.

Faculty members are committed to make learning environment more interactive, to integrate technology into the learning experience, and to use collaborative learning strategies when appropriate.

### **11.6 Hospital Facilities for Clinical Teaching for Pharmacy Practice Students**

RAKMHSU shall use the facilities of Sheikh Saqr hospital and Ibrahim Bin Hamad Obaidullah hospitals and Obaidullah Geriatric hospital in Ras Al Khaimah for teaching and pharma training of the students, in addition to the various primary health centers available in Ras Al Khaimah under the ambit of RAK Medical Zone.

Pharmacy Practice students will participate in ward rounds with medical, nursing and other students throughout the duration of the course, from first semester

Sheikh Saqr Hospital has bed capacity of 278 and has 99 consultants, of whom 48 have terminal degrees and the remaining are general practitioners. All the surgical specialties, General Surgery, Urology, Neurosurgery, Orthopedic Surgery, Oto-rhino-laryngology, Ophthalmology, Obstetrics and Gynecology and Pediatrics are located in the hospital.

All the medical specialties, Internal Medicine, Neurology, Respiratory and Chest Medicine, and Cardiology are located in Ibrahim Bin Hamad Obaidullah Hospital.

### **11.7 Assessment, Evaluation, Grading and Promotion**

#### **11.7.1 Assessment**

Students shall be assessed continuously through assignments, seminars, tests, quizzes, problem solving exercises, case presentations and University Examination for each course. The continuous assessment components for each course shall be graded for 50% of the marks and the University Examinations shall be graded for the remaining 50% marks.

During the examinations, theory, and where applicable, practical examinations shall be held for each course and graded for 50% of the total marks in the determination of the final grade.

#### **11.7.2 Theory**

Written examination: Continuous Assessment - 50% :  
University Exam – 50% (**Specific for each course**)

- Restricted response essays
- Multiple choice questions (one best response)
- Assessment of active learning sessions

#### **11.7.3 Practical (Specific for each course)**

- § Continuous assessment – 50%
- § End Semester Practical Examination (ESPE) – 50%  
Case presentations (wherever applicable)

#### 11.7.4 Examination Schedule (MS)

Semester	Courses	Sequence of Examinations
1	Advanced Pharmacotherapeutics- I	At the end of First Semester
	Patient Data Analysis	
	Advanced Hospital Pharmacy	
	Modern Community Pharmacy	
2	Advanced Pharmacotherapeutics- II	At the end of second semester
	Advanced Clinical Pharmacy	
	Clinical Pharmacokinetics & Toxicology	
	Drug Discovery development and Research	
3 & 4	Dissertation	At the end of the 4 <sup>th</sup> Semester
3	Seminar I	within first month of registration
	Seminar II	Before 1 month of end of semester
4	Seminar I	within first month of registration
	Seminar II	Before 1 month of end of semester

**11.8A Proposed Study Plan for MS Program in Pharmacy Practice (1<sup>st</sup> yr- 1,2 semesters)**

FIRST YEAR											
Semester 1	Course #	Title	Credits			Semester 2	Course #	Title	Credits		
			Theory	Ward rounds/Case presentation/ Assignments	CBL/ Seminar				Theory	Ward rounds/Case presentation/ Assignments	CBL/ Seminar
	PAPT 611	Advanced Pharmacotherapeutics –I	2	2	1	PAPT 621	Advanced Pharmacotherapeutics-II	2	2	1	
	PPDA 612	Patient Data Analysis	2	2		PACP 622	Advanced Clinical Pharmacy	2	2		
	PAHP 613	Advanced Hospital Pharmacy	2	2		PPTX 623	Clinical Pharmacokinetics & Toxicology	2	2		
	PMCP 614	Modern Community Pharmacy	2	2		PDDR 624	Drug Discovery Development & Research	2	2		
<b>Total = 17</b>			16			<b>Total = 17</b>			16		

**11.8B Proposed Study Plan for MS Program for Dissertation for 3 & 4 semesters:**

Semester 3	Course	Title	Credits			Semester 4	Course	Title	Credits		
			T	P	C				T	P	C
	PDIS 711	Pharmacy Dissertation*	-	04	-	PDIS 711	Pharmacy Dissertation(Contd)	-	04	-	
	PDIS 712	Research Seminar*	-	02	-	PDIS 712	Research Seminar(Contd)	-	02	-	
<b>Total credits:</b>			<b>06</b>			<b>Total credits:</b>			<b>06</b>		

T- Theory, P- Practical, C - Clinical

\*No end semester exam after semester 3

### **11.9.1 Training in Hospitals (Clinical Pharmacy)**

This will facilitate the gaining of knowledge and skills from clinicians and pharmacists about common disease conditions and their management with drugs, clinical data and interpretation. It will also help the students to understand drug purchase, storage, distribution to wards, emergency purchase and record keeping. Students will also participate in the development of essential drug list, hospital formulary immunization and other health care programs. Students will learn patient counseling, drug information services and ADR reporting and monitoring.

### **11.9.2 Training in Community Pharmacy**

This training will help students to gain knowledge and skills from pharmacists about drug purchase, storage, dispensing against prescriptions, Over The Counter (OTC) drugs, self medication, record keeping and documentation of drugs sold, patient counseling and health education.

### **11.9.3 Program administration**

Separate co-coordinator will be identified to work under Dean of Pharmacy who will be responsible for implementation of the program effectively with necessary documentation. The training will be divided into two stages – Nine months in Hospitals and two months in community pharmacy .Students will be monitored and documents will be reviewed by the coordinator on a regular basis.

**Section 11.10****SUMMARY OF COURSES****SEMESTER I****PAPT 611: Advanced Pharmacotherapeutics 1****(2+2=4)**

The aims of the course are to develop the necessary professional skills in the student for the drug therapy management of different diseases, such as cardiovascular diseases, respiratory diseases, hematological and inflammatory disorders; resolving drug related problems; and appreciate the quality use of medicines. This knowledge helps the students to apply therapeutic skills and rational selection of drugs in the management of diseases. Learning is facilitated through interactive lecture sessions, self-directed learning of small group sessions, case based learning, assignments, problem based learning, seminar and course examinations.

**PPDA 612: Patient Data Analysis****(2+2=4)**

The main goal of the course is to prepare the student to understand the professional roles of clinical pharmacist. During the course, the students are taught about the importance of ward round participation, collecting medication history to monitor the drug therapy by analyzing the lab profiles of the patient, provision of unbiased drug information to the prescribers and counseling to the patients. Monitoring of drug therapy of patients through medication and clinical review, obtaining medication history and counseling the patients, identifying and resolving drug related problems, detecting, assessing and monitoring adverse drug reactions, and interpreting selected laboratory results (as monitoring parameters in therapeutics) of specific disease states. Retrieval, analysis, interpretation and formulation of drug/medicines is also covered.

**PAHP 613: Advanced Hospital Pharmacy****(2+2=4)**

The main goal of the course is to prepare the student to understand the professional roles of hospital pharmacist and delegate the same diligently to provide effective services to the clinicians and patients. The students are taught about various hospital pharmacy services such as drug dispensing, distribution, patient counseling and drug therapy monitoring for improved patient care.

**PMCP 614: Modern Community Pharmacy****(2+2=4)**

The aim of the course is to enable the student to: effectively manage a community pharmacy through proper layout and design of the pharmacy; effective inventory control to ensure business profitability; pharmaceutical care concept; patient counseling and its influence on patient medication adherence; and importance of health screening services in drug therapy management. Dispensing of drugs, responding to minor ailments by providing suitable safe medication, patient counseling, and health screening services for improved patient care in the community set up will also be included.

## SEMESTER II

### **PAPT 621: Advanced Pharmacotherapeutics II**

**(2+2=4)**

The aims of the course are to develop the necessary professional skills in the student for the drug therapy management of different diseases, such as bone and joint disorders Neurological disorders, psychiatric disorders, dermatological disorders, oncology and infections diseases, resolving drug related problems; and appreciate the quality use of medicines. This knowledge helps the students to apply therapeutic skills and rational selection of drugs in the management of diseases. Learning is facilitated through interactive lecture sessions, self-directed learning (small group sessions, case based learning, assignments, problem based learning, seminar and course examinations).

### **PACP 622: Advanced Clinical Pharmacy**

**(2+2=4)**

The main goal of the course is to prepare the student to understand the professional roles of clinical pharmacist. During the course, the students are taught about pharmaco-economics, pharmaco- epidemiology, ADR, Drugs and poison information and pharmacogenetics. Monitoring of drug therapy of patients through medication and clinical review, obtaining medication history and counseling the patients, identifying and resolving drug related problems, detecting, assessing and monitoring adverse drug reactions, and interpreting selected laboratory results (as monitoring parameters in therapeutics) of specific disease states. Retrieval, analysis, interpretation and formulation of drug/medicines is also covered

### **PPTX 623: Clinical Pharmacokinetics & Toxicology**

**(2+2=4)**

Clinical Pharmacokinetics & clinical Toxicology designed to prepare the student to learn and understand the significance of the various pharmacokinetic parameters and apply this in various clinical situations. The course aims at the students ability to plan the dosage adjustments based on the drug levels. Students also will be learning bioavailability and bioequivalence studies and its clinical significance. Students will also learn the different poisoning cases that are encountered in the hospital in UAE, their clinical manifestations and management.

### **PDDR 624: Drug Discovery development & Research**

**(2+2=4)**

The course is designed to learn the different steps involved in drug development process, preclinical and clinical screening including the various toxicity studies. The course also provides information about ICH GCP guidelines and its relevance in clinical research. The students are also required to learn about the basic biostatistics and its importance in clinical research

## SEMESTERS 3 & 4

**Dissertation & seminar for Pharmacy Practice****Total credits 6+6**

The dissertation is aimed to train a Post graduate student in research methods and techniques under the guidance of a recognized guide. Student will be trained in literature review, design of research study, data collection, critical analysis, comparison of results, drawing conclusions and making recommendations. A total of 4 credits is assigned in 3<sup>rd</sup> and 4<sup>th</sup> semesters for different areas of dissertation work mentioned above. Along with this 2 credit hours are assigned for the research seminar related to the dissertation work. The dissertation submitted will be evaluated by the external examiners appointed by the university. Seminars and progress reports given by the students will help in problem solving, team work and leadership qualities.

Details in the dissertation manual

**11.11 Prerequisites for Master's program(MS) in pharmacy practice**

The potential candidate may be evaluated based on his/her demonstration of interest, leadership, quality of performance in the professional activities including education, service and research. A provisional acceptance of an applicant with either grade or course deficiency may be considered by the department and the program committee.

In addition, the applicant must meet all the requirements according to RAKMHSU master's program guidelines/policies

**Prerequisites for M.S in pharmacy practice:**

Sno	Course Title	Pre-requisites
1	Advanced Pharmacotherapeutics I, PAPT 611	PTH 613, 723 & 833
2	Patient Data Analysis - PPDA 612	PCL 503
3	Advanced Hospital Pharmacy - PAHP 613	PHP 803
4	Modern Community Pharmacy - PMCP 614	PCP 603
5	Advanced Pharmacotherapeutics II - PAPT 621	PAPT 611
6	Advanced Clinical Pharmacy - PACP 622	PPDA 612
7	Clinical Pharmacokinetics and Toxicology - PPTX 623	PCL 503, PCO 413, PCO 522, PCO 633, PCO 742
8	Drug Discovery, Development and Research - PDDR 624	PCO 413, PCO 522, PCO 633, PCO 742 & SRM 101

PTH – Therapeutics

PCL – Clinical Pharmacy

PHP – Hospital Pharmacy

PCP – Community Pharmacy

PAPT – Advanced Pharmacotherapeutics  
PPDA – Patient Data Analysis  
PCO – Pharmacology  
SRM – Statistics & Research Methodology

### 11.12 MS Program – Pharmacy Practice: First Semester – Weekly Time Table

Days / Hours	8:30 ~ 9: 30 a.m.	9:30~10:30 a.m.		10:45 ~ 11.45 a.m.	11.45 ~ 12:45 p.m.		1:30 ~ 2:30 p.m.	2:30 ~3:30 p.m.	3.30 ~4.30 p.m.
<b>Sunday</b>	Advanced Pharmacotherapeutics I	Ward rounds	Morning Break 10:30 ~ 10:45 a.m.)	Seminar	Modern community Pharmacy	Lunch Break (12:45 ~ 1:30 p.m.)	PBL	PBL	SDL
<b>Monday</b>	Patient Data analysis	Ward rounds		Seminar	Advanced hospital pharmacy		Case presentation/ assignment		
<b>Tuesday</b>	Advanced hospital pharmacy	Ward rounds		Seminar	Patient Data analysis		Case presentation/ assignment		
<b>Wednesday</b>	Modern community Pharmacy	Ward rounds		Seminar	Advanced PharmacotherapeuticsI		Case presentation/ assignment		
<b>Thursday</b>	Self Study			PBL	PBL		Case presentation/ assignment		

## 12. Master of Science in Pharmaceutical Chemistry

Master of Science (Pharmaceutical Chemistry) comprises of one year of pharmaceutical sciences subjects and practical training and one year of dissertation work specialized in pharmaceutical chemistry.

**The total duration is two years**

### 12.1 The Goals and Objectives

The curriculum has been developed to provide learning opportunities enabling pharmaceutical chemistry students to acquire fundamental knowledge develop basic skills and appreciate principles relevant to medicinal chemistry, an amalgamation of chemistry and the life sciences

The two-year curriculum has been designed to achieve the following goals:

1. To provide a comprehensive pharmaceutical education leading to M. Pharm Degree in Pharmaceutical Chemistry.
2. To prepare for drug discovery in the changing and challenging health care environment of the 21st Century using the knowledge of organic, bioorganic and computer aided methods.
3. To integrate medicinal chemistry with related pharmaceutical sciences to enable the students to apply their knowledge to drug development
4. To integrate analytical skills to enable the students ensure quality pharmaceutical products and care.
5. To develop a professional for the Isolation, synthesis and analysis of drugs
6. To understand the relationship between chemistry, pharmacokinetics and pharmacology of drugs
7. To provide industry and laboratory based pharmacy education program.
8. To prepare pharmacists who can function effectively in the social health care system.
9. Contributing to social development through research on pharmaceutical sciences

## **12.2 Program Outcomes**

### **12.2.1 Knowledge**

At the end of the program, the students shall be able to:

1. Demonstrate knowledge of the basic pharmaceutical sciences, and the ability to acquire, manage and use current information for problem solving.
2. Recognize the scientific basis of health, disease, and design and synthesize new drugs for the treatment and management of common and high impact medical conditions in contemporary society
3. Describe the molecular basis of diseases and synthesize/isolate new chemicals.
4. Demonstrate the knowledge of pharmaceutical care especially through quality control of drugs and pharmaceuticals.
5. Identify drug interactions and help patient counseling, DI services and ADR reporting with medicinal chemistry, bioorganic, pharmacokinetics and pharmacology knowledge.
6. Describe the synthesis, formulation & analysis of drugs & pharmaceuticals

### **12.2.2 Skills**

At the end of the program, the students shall be able to:

1. Design and develop methods for new drug development.
2. Formulate and analyse the drug and drug intermediates
3. Organize, record, research, present, criticise, and manage drug discovery and development.
4. Conduct Industry-based investigation and evaluation of drugs.
5. Synthesise, formulate , analyse and test drugs and pharmaceuticals

### **12.2.3 Attitudes/Behaviors**

At the end of the program, the Students shall be able to:

1. Compare and modify their own skills , analyze & monitor personal development
2. Formulate & present their own view point while respecting others views and opinions
3. Exhibit a capacity for self-evaluation, moral reflection and ethical reasoning to form the basis for a self-directed, lifelong

### **12.3 The Curriculum**

In the first semester students will be taught Bioorganic Chemistry and Drug Metabolism, Instrumental analysis techniques, Advanced Pharmaceutical Organic Chemistry and Pharmacokinetics and Pharmacology

In the second semester the students will be exposed to Drug Design and Development, medicinal chemistry courses including heterocyclic and chemistry of natural products.

In the third and fourth semesters, students will be exposed to research and expected to take up research project in the emerging area and contribute for the upliftment of the pharmaceutical research and submit duly bound thesis of the research findings at the end of the fourth semester. Joint research projects with pharmaceutical industry will be encouraged. This will expose the students to real life situations and prepare them to face challenges in their working career.

### **12.4 Instructional Methods Based on the Objectives:**

RAKMHSU is committed to being responsive to students' needs and preparing students to assume future societal leadership roles to meet political, economic, social and technological challenges.

Faculty members are committed to make learning environment more interactive, to integrate technology into the learning experience, and to use collaborative learning strategies when appropriate.

### **12.5 Industry Facilities for Research and Teaching of Pharmacy Students**

RAKMHSU has already entered into an MOU with Julphar Pharmaceuticals And Himalaya Drug Company for joint research projects in addition to teaching and pharmaceutical training of the students.

### **12.6 Assessment, Evaluation, Grading and Promotion**

#### **12.6.1 Assessment**

Students shall be assessed continuously through assignments, seminars, tests, quizzes, problem solving exercises and University Examination for each course. The continuous assessment components for each course shall be graded for 50% of the marks and the university examinations shall be graded for the remaining 50% marks.

During the examinations, theory, and where applicable, practical examinations shall be held for each course and graded for 50% of the total marks in the determination of the final grade.

#### **12.6.2 Theory**

Written examination: Internal - 50%:

University Exam – 50% (**Specific for each course**)

§ Multiple choice questions (one best response) – 50%

§ Restricted response essays – 50%

**12.6.3 Practical (Specific for each course)**

§ Written exam – Continuous Assessment – 50%

§ End Semester Practical Examination (ESPE) – 50%

### 12.6.4 Examination Schedule (MS in Pharmaceutical Chemistry)

Semester	Courses	Sequence of Examinations
1	Bioorganic Chemistry and Drug Metabolism	At the end of First Semester
	Instrumental analysis techniques	
	Advanced Pharmaceutical Organic Chemistry	
	Pharmacokinetics and Pharmacology	
2	Drug Design and Development	At the end of second semester
	Heterocyclic Chemistry	
	Chemistry of Natural Products	
	Medicinal Chemistry	
3 & 4	Dissertation	At the end of the 4 <sup>th</sup> Semester
3	Seminar I	within first month of registration
	Seminar II	Before 1 month of end of semester
4	Seminar I	within first month of registration
	Seminar II	Before 1 month of end of semester

**12.7A Proposed Study Plan for (MS) Program in Pharmaceutical Chemistry (1<sup>st</sup> year- 1,2 semesters)**

FIRST YEAR											
	Course #	Title	Credits				Course #	Title	Credits		
			Theory	Practical	Seminar				Theory	Practical	Seminar
Semester 1	PBDM611	Bioorganic Chemistry and Drug metabolism	3	0	1	Semester 2	PDDD621	Drug Design and Development	2		1
	PIAT612	Instrumental analysis techniques	2	2	1		PHTC622	Heterocyclic Chemistry	2	2	1
	PPOC613	Advanced Pharmaceutical Organic Chemistry	3	2	1		PCNP623	Chemistry of Natural Products	2	2	1
	PPAP614	Pharmacokinetics and Pharmacology	2	0	1		PMDC624	Medicinal Chemistry	2	2	1
<b>Semester Total</b>			<b>18 Credits</b>			<b>Semester Total</b>			<b>18 Credits</b>		

**12.7B Proposed Study Plan for (MS) Program in Pharmaceutical Chemistry for Dissertation (2<sup>nd</sup> year- 3,4 semesters) :**

SECOND YEAR											
	Course #	Title	Credits				Course #	Title	Credits		
			Theory	Practical	Seminar				Theory	Practical	Seminar
Semester 3	PDIS 711	Pharmacy Dissertation*	-	04	-	Semester 4	PDIS 711	Pharmacy Dissertation(Contd)	-	04	
	PDIS 712	Research Seminar*	-	02	-		PDIS 712	Research Seminar(Contd)	-	02	-
Total credits:			<b>06</b>			Total credits:			<b>06</b>		

\*No end semester exam after semester 3

## 12.8 SUMMARY OF COURSES

All the following courses will have various self directed learning practices like seminars, assignments, group discussion and problem based learning methodologies apart from the regular course study.

### SEMESTER 1

#### **PBDM611 - Bioorganic Chemistry and Drug Metabolism (3+0=3)**

The course deals with the drug metabolism or drug biotransformation and enzyme-catalyzed changes in drug structure. The course is designed to provide knowledge of drug metabolism based on drug design. The course deals with Factors that modulate drug metabolism including external and internal factors and drug metabolism induction and inhibition are considered. The topics give details about Pharmacological aspects of drug metabolism and toxicological aspects the course covers Pharmacokinetic and the clinical relevance of drug metabolism. The course topics are so coordinated as to reinforce the topic in drug design and development and medicinal chemistry.

#### **PIAT612- Instrumental analysis techniques (2 +2=4)**

The course focuses on various modern instruments used in quantitative and qualitative determination of drug substances with special reference to quality control and quality assurance. The course also deals with the theory and practice of quantitative analysis at the advanced level, the principle and workings of separation techniques like gas chromatography, HPLC, mass spectroscopy and NMR. The course deals with statistics for experimental design and analysis. This course is designed to impart quality consciousness among the students so they will be able to identify spectral interpretation and structure determination.

#### **PPOC613- Advanced Pharmaceutical Organic Chemistry (3+2=5)**

This course deals with the various aspects of organic chemistry which are important in the synthesis of different kinds of organic drug intermediates. The topics give the detailed information about Catalysis, Aromatic Nucleophilic reactions, stereochemistry and pericyclic reactions. This also teaches about advanced synthetic techniques like combinatorial chemistry. The topics discussed here will be organic chemistry, mechanisms, stereo chemical aspects and medicinal chemistry and biochemistry.

#### **PPAP614-Pharmacokinetics and Pharmacology (2+0=2)**

In this course students get an overview of the general aspects of pharmacology, including drug absorption, distribution metabolism and excretion, endogenous neurotransmitters; effect of depressants and stimulants on the central nervous system; anesthetics; drugs used in cardiovascular diseases; drug effects on the respiratory tract; drugs that influence metabolic and endocrine functions; chemotherapy; and principles of toxicology.

In this course the aim is to present the fundamentals of the delivery and maintenance of therapeutic levels of drugs at the target tissues. Intensity of drug effect and duration of drug action is seen to be controlled by the pathways of drug movement and metabolism in the body

Also surveying the molecular and cellular aspects of receptor mechanisms, signaling pathways, effectors systems, and chemotherapeutic approaches. Topics covered include drug-receptor interactions; ligand- and voltage-gated ion channels; G protein pathways; growth factor signaling; lipid signaling; calcium signaling; nutrient and nitric oxide signaling; mechanisms of receptor-mediated effects on neural excitability, electrical pacemakers, muscle contraction and gene expression; chemotherapy, including antimicrobial agents and cancer chemotherapy.

## **SEMESTER 2**

### **PDDD621- Drug Design and Development**

**(2+0=2)**

This course deals with the chemical basis of drug action including 3D interaction. It also provides information about understanding of drug structure/functional group and receptor to exhibit the specific biological activity. The course is designed to provide knowledge of physico-chemical properties and their relationship with the drug design and discovery methods including refinement of lead structure. The topics give detailed information about drug discovery methods and developments in computer assisted drug design methodologies like QSAR, Molecular modeling and structure based drug design. The topics discussed here will reinforce the knowledge in drug design and development and medicinal chemistry, chemical, physical and related pharmacology of bio molecules of interest.

### **PHTC622 Heterocyclic chemistry**

**(2+2=4)**

A majority of the compounds produced by nature have heterocyclic rings as part of their structures. Many heterocyclic rings are found as key components in biological systems. Significant numbers of compounds synthesized in the industrial sector each year are heterocyclic in nature. Thus, industrial organic chemists need to be aware of the major new developments in this area you will be able to make predictions about the reactivity and properties of unfamiliar heterocycles by examination of structure. Knowledge of modern heterocyclic synthetic methods will be updated. A manageable conceptual framework for the organization of heterocyclic synthetic methods will be acquired, based on broad chemical concepts. You will be able to propose reasonable synthetic routes to unfamiliar heterocycles by applying basic disconnection approaches will become familiar with the use of heterocyclic compounds as intermediates for organic synthesis. The ability to effectively use the literature of heterocyclic chemistry will be gained.

### **PCNP623 Chemistry of Natural products**

**(2+2=4)**

The course will cover a description of the basic building blocks and reaction mechanisms involved in the biosynthesis of naturally occurring compounds. The goal of the course is to provide students with a sound understanding of the structure and origin of these natural products and to introduce specific molecules that are of

current interest in the field of chemical biology. We will also discuss the biological target and mechanism of action of these compounds as well as details of structure-determination and chemical synthesis where appropriate.

Identify the structural units in a given natural product and their origin. Propose a biosynthetic pathway for the biosynthesis of the target. This will develop an awareness of natural biosynthetic processes and what types of enzyme catalyzed reactions are involved. Have a comprehensive understanding of major compounds of current interest in chemical-biology such as taxol, artemisinin, doxorubicin, pancratistatin, tamiflu etc. Have a good overview of the general uses of such natural products and derivatives as leads for anticancer, antibacterial, antiviral, antiparasitic and specific enzyme inhibitory properties. A more general perception that will develop is the theme that Natural selection is significantly manifest at the secondary metabolic level. Hence we should not be surprised to find potent antibacterial, antifungal, cytostatic antiviral etc, etc, compounds in Nature. The course will also emphasize Nature's use of "combination therapy" in battling pathogens and some valuable take home lessons in medicinal chemistry.

**PMDC624 Medicinal Chemistry:**

**(2+2=4)**

This course deals with the medicinal chemistry of various types of drugs which are obtained from different sources. The course is designed to provide knowledge about development of drugs based on different approaches. The topics give detailed information about pro-drugs, rational design of enzyme inhibitors and Recombinant DNA Technology for new drug development and detailed study about drugs affecting immune system and inhibitors of gastric acid secretion; this also teaches importance of microbes as catalytic tools for the preparation of various drug molecules. The topics discussed here will reinforce the knowledge in chemistry, enzymes, biotechnology, biochemistry, immunology and specific inhibitors.

**SEMESTERS 3 & 4**

**Dissertation and seminar for Pharma. Chemistry**

**Total credits (6+6)**

The dissertation is aimed to train a Post graduate student in research methods and techniques under the guidance of a recognized guide. Student will be trained in literature review, design of research study, data collection, critical analysis, comparison of results, drawing conclusions and making recommendations. A total of 4 credits is assigned in 3<sup>rd</sup> and 4<sup>th</sup> semesters for different areas of dissertation work mentioned above. Along with this 2 credit hours are assigned for the research seminar related to the dissertation work. The dissertation submitted will be evaluated by the specialist examiners appointed by the university. Seminars and progress reports given by the students will help in problem solving, team work and leadership qualities.

Details in the dissertation manual

**12.9 Prerequisites for Master's Program(MS) in pharmaceutical Chemistry**

The preliminary academic background required for the degree of Master of Science in Pharmaceutical Chemistry is substantially the equivalent of that represented by the Bachelor of Pharmacy degree in Pharmaceutical Chemistry at the University of Ras Al-Khimah (see the undergraduate Catalog of RAKMHSU) or equivalent. Any applicant whose undergraduate preparation does not include a complete foundation for undergraduate work in the field of pharmaceutical chemistry will be required to do 1 or more specific undergraduate courses listed below. Final decision regarding the courses to be completed will be taken by the PG admission committee.

**Prerequisites for M.S in Pharm. Chemistry:**

Pharm. Organic Chemistry 1 POC 213,  
 Pharm. Organic Chemistry 2 POC 323  
 Pharm. Inorg Chemistry 1 PIC 213  
 Pharma Analy Chemistry 1 PAC 213  
 Pharmacognosy & Phytochemistry PCG 413  
 Applied Biochem & Clinical Chemistry 1 PBC 413  
 Pharmacology 1 30804  
 Medicinal Chemistry 1 PMC 413, Medicinal Chemistry 2 PMC 523  
 Instrumental and Biomedical Analysis 31807

**Prerequisites for Masters courses in Pharmaceutical Chemistry**

Sno	Course Title	Pre-requisites
1	Bioorganic Chemistry and Drug Metabolism	POC 323 & PMC 523
2	Instrumental analysis techniques	PAC 213 & POC 323
3	Advanced Pharmaceutical Organic Chemistry	POC 213 & POC 323
4	Pharmacokinetics and Pharmacology	PCOL 633
5	Drug Design and Development	POC 323 & PMC 523
6	Heterocyclic Chemistry	POC 323, POC 213 & PMC 523
7	Chemistry of Natural Products	POC 323 & PCG 403
8	Medicinal Chemistry	PMC 413, PMC 523 & POC 323

POC – Pharmaceutical Organic Chemistry, PMC- Pharm. Medicinal Chemistry, PAC – Pharmaceutical Analytical Chemistry, PCIL – Pharmacology, PCG- Pharmacognosy.

12.10 MS Program – Pharmaceutical Chemistry: First Semester – Weekly teaching schedule:

Days / Hours	08:30am-09:30am	09:30-10:30am		10:45am-11:45 am	11:45am-12:45pm		01:30pm-02:30pm	02:30pm-03:30pm	03:30pm-04:30pm
<b>Sun</b>	Bioorganic Chemistry and Drug metabolism	Bioorganic Chemistry and Drug metabolism	<b>Morning Break 10:30am-10:45am</b>	Seminar		<b>Lunch Break 12:45pm-01:30pm</b>	PBL	PBL	
<b>Mon</b>	Instrumental analysis techniques	Instrumental analysis techniques		Seminar			Instrumental analysis techniques (Practical)		
<b>Tue</b>	Advanced Pharmaceutical Organic Chemistry	Advanced Pharmaceutical Organic Chemistry		Seminar			Advanced Pharmaceutical Organic Chemistry (Practical)		
<b>Wed</b>	Pharmacokinetics and Pharmacology	Pharmacokinetics and Pharmacology		Seminar			Library		
<b>Thu</b>	Bioorganic Chemistry and Drug metabolism	Advanced Pharmaceutical Organic Chemistry		PBL			Library		

## **13 Master of Science in Nursing degree Program**

The Master of Science in Nursing degree (MSN) program is for a minimum of two years of full-time study and four years for part-time learners. It has specialty of Adult Health Nursing

The Master of Science in Nursing (MSN) graduate program prepares nurse experts in advanced practice and/or management for leadership in professional nursing practice and patient centered health care delivery. The program broadens the perspective of students by requiring them to take innovative interdisciplinary approaches to resolve health care problems.

Further to this, the program will provide learning opportunities for the development of knowledge, intellectual skills, and clinical competence necessary to fulfill the role of the advanced practice nurse, nurse educator and nurse administrator. It will also enhance the development of skills and knowledge to function as a clinical nurse specialist and, and also provide a foundation for doctoral study.

Specialty: Adult Health Nursing

The clinical sequence in Adult Health Nursing has three functional areas such as: Nursing leadership nursing educator and clinical nurse specialist. These functional areas will prepare graduate nurses for the practice of advanced nursing, such as to function as leaders in clinical nursing settings or as clinical specialists in nursing of adults. The program of studies leading to the MSN, with the clinical focus in Adult Nursing requires a minimum of 50 credits. The adult nursing student will complete thesis as part of graduation requirement.

### **13.1 The Goals and Program Outcomes**

#### **Goals**

The goal of the program is based on the National league of Nursing core values of caring, integrity, diversity, and excellence and on the Educational Competencies Model (2010), which calls for graduates of nursing programs to be prepared to: a) promote and enhance human flourishing for patients, families, communities, and themselves; b) show sound nursing judgment; c) continually develop their professional identity; and d) maintain a spirit of inquiry as they move into the world of nursing practice and beyond.

The two year curriculum has been designed to achieve the following goals:

1. Function as a leader and change agent in one's specialty area of practice to create systems that promote human flourishing.
2. Make judgments in one's specialty area of practice that reflect a scholarly critique of current evidence from nursing and other disciplines.

3. Identify gaps in knowledge and formulate research questions.
4. Implement one's advanced practice role in ways that foster best practices.
5. Promote the personal and professional growth of oneself and others
6. Demonstrate leadership, promote positive change in people and systems and advance the profession.
7. Maintain a spirit of inquiry and contribute to the science of nursing in one's specialty areas of practice
8. Evaluate the impact on quality when evidence-based solutions to nursing problems are implemented.

## **13.2 Program Outcomes**

### **13.2.1 Knowledge:**

**The Master of Science in nursing graduates will be able to:**

1. Integrate nursing and related sciences into delivery of advanced nursing care to diverse populations;
2. Synthesize knowledge from the sciences, humanities and nursing to support advanced nursing practice and role development;
3. Incorporate current and emerging genetic/genomic evidence in providing advanced nursing care to individuals, families, and communities, while accounting for patient values and clinical judgment;
4. Integrate organizational science and informatics to make changes in the care environment to improve health outcomes.
5. Analyze the impact of policy, organization, and financing of health care on systems.
6. Demonstrate clinical judgment within the context of the advanced practice role.
7. Advocate collaborative and interdisciplinary approaches to the design of comprehensive care to individuals/families, communities, and populations.
8. Integrate theory, clinical inquiry, and evidence-based nursing practice into the advanced practice role.
9. Participate in the design, implementation, and evaluation of health care systems to foster safe passage and excellence in health care delivery.
10. Implement effective strategies for management and utilization of health information to improve quality of care, contribute to the development of nursing knowledge, and facilitate interdisciplinary communication in support of the business of health care delivery.
11. Implement evidence-based plans based on trend analysis and quantify the impact on quality and safety
12. Formulate, implement and evaluate strategies based on concepts of Advance nursing concepts.

### **13.2.2 Skills:**

1. Practice nursing utilizing advanced knowledge and skills as evidenced by scientific thinking in the use of theoretical formulations in the design of

nursing interventions, and self direction in the exercise of leadership involving health care problems.

2. Apply theoretical models to guide advanced nursing practice designed to promote health and wellness in clients across the lifespan.
3. Function independently in providing nursing care and interdependently with other health professionals in the coordination and delivery of health care to individuals, families and communities
4. Create a culturally competent practice environment to enhance health care outcomes
5. Use quality processes and improvement science to evaluate care and ensure patient safety for individuals and communities.
6. Apply leadership skills and decision making in the provision of culturally competent, high quality nursing care, healthcare team coordination, and the oversight and accountability for care delivery and outcomes.
7. Assume a leadership role in effectively implementing patient safety and quality improvement initiatives within the context of the interprofessional team using effective communication skills.
8. Apply business and economic principles and practices, including budgeting, cost/benefit analysis, and marketing, to develop a business plan.
9. Implement evidence-based plans based on trend analysis and quantify the impact on quality and safety
10. Follow the ethical principles to guide decision-making in nursing practice
11. Use the research process to promote the development of professional nursing and to facilitate client wellness.

#### **13.2.3 Attitudes/Behaviors:**

1. Act as change agents to create environments that promote effective nursing practice and patient outcomes.
2. Demonstrate independent-thought and action, professional autonomy, and effective communication in collegial and collaborative relationships with peers and with members of allied disciplines.
3. Champion ethical decision making in all aspects of practice with self, patient/family, community, and health care delivery systems
4. Commit to lifelong learning for self and consumers.
5. Apply legal and ethical principles to implement advanced practice nursing roles
6. Demonstrate accountability for continual professional development.
7. Assume a leadership role in creating a compassionate and caring environment to promote comfort and prevent suffering.
8. Advocate for ethical conduct of research and translational scholarship with particular attention to the protection of patient rights

#### **13.4 The Curriculum**

The Master of Science in nursing graduate education builds upon the generalist foundation of baccalaureate education to prepare nurses for advanced practice roles. Graduate education provides the student with opportunities to develop expertise and specialized knowledge in the care of clients and populations. The

graduate program is organized using core, supporting, and specialty content. Graduate nursing education incorporates evidence-based practice that enables nurses to participate in health policy development, research, health promotion, and management, with emphasis on diverse and vulnerable populations. Advanced practice nursing roles include nurse practitioners, clinical nurse specialists, nurse administrators, and nurse educators. We believe that the advanced practice nursing roles are integral to meeting the current and future health needs of society.

### 13.5 Instructional Methods Based on the Objectives

RAKMHSU is committed to being responsive to students' needs and preparing students to assume future societal leadership roles to meet political, economic, social and technological challenges.

Faculty members are committed to make learning environment more interactive, to integrate technology into learning experience, and to use collaborative learning strategies when appropriate.

Instructional methodologies like problem-based learning (PBL), evidence-based learning, small group teaching shall be integrated according to the objectives.

### 13.6 Clinical Experience

The first semester begins with practical experience in hospital settings for Advance Health Assessment, preceded by management and leadership experience in the hospital as acting Nursing Director to learn their role as manager.

In the second year of the program, students have an opportunity to learn and practice in their speciality area, along with their research project in the area of speciality.

#### Clinical Rotation, Weeks per Semester

Course					
	I	II	III	IV	Total
	No. of Weeks				
Advance Health Assessment	7	-	-	-	7
Organizational & System Leadership	7	-	-	-	7
Issues in Nursing Practice	-	-	-	-	-
<b>Specialty: Adult Health Nursing</b>	-	-	-	-	-
Adult Health Nursing-1	-	-	12		12

Course					
	I	II	III	IV	Total
	No. of Weeks				
Adult Health Nursing-2	-	-	-	12	12
	<b>14</b>	<b>0</b>	<b>12</b>	<b>12</b>	<b>38</b>

### 13.7 Hospital Facilities for Clinical Teaching

RAK-MHSU will use the facilities of Sheikh Saqr hospital and Ibrahim Bin Hamad Obaidullah hospitals in Ras Al Khaimah for teaching and clinical training of the students, in addition to the various primary health centers available in Ras Al Khaimah under the ambit of RAK Medical Zone and also all the hospitals and PHCs of Department of Health Authority (DHA), Dubai.

Sheikh Saqr Hospital has bed capacity of 278 and has 99 consultants, of whom 48 have terminal degrees and the remaining are general practitioners. All the surgical specialties, General Surgery, Urology, Neurosurgery, Orthopedic Surgery, Oto-rhino-laryngology, Ophthalmology, Obstetrics and Gynecology and Pediatrics are located in the hospital.

All the medical specialties, Internal Medicine, Neurology, Respiratory and Chest Medicine, and Cardiology are located in Ibrahim Bin Hamad Obaidullah Hospital.

### 13.8 Thesis

The project/thesis is a faculty-guided scholarly experience that provides evidence of your critical thinking, ability to integrate information, and understanding of research.

### 13.9 Integrating Technology

Today, educators realize that computer literacy is an important part of a student's education. Integrating technology into a course curriculum, when appropriate, is proving to be valuable for enhancing and extending the learning experience for faculty and students. Many faculties have found electronic mail to be a useful way to promote student/student or faculty/student communication between class meetings. Others use on-line notes to extend topic discussions and explore critical issues with students and colleagues, or discipline-specific software to increase student understanding of difficult concepts.

### 13.10 Online (Technology) Scenario

Access to:

§ The book readings;

- § Classroom lectures;
- § Online discussions; and
- § Build a web page after researching via an online database.

The learning objectives/goals/outcomes shall be defined while preparing instructional material for the students.

### **13.11 Assessment, Evaluation, Grading and Promotion**

Students shall be assessed continuously through assignments, seminars, tests, quizzes, problem solving exercises, clinical case studies and final examination for each course. The continuous assessment components for each nursing course shall be graded for 50% of the marks. This 50% of the marks will be given weightage as shown below in 1.15.1. The final examinations shall be graded for the remaining 50% marks.

#### **13.11.1 Assessment**

##### **Theory**

Written examination:

- § Restricted response essays; and
- § Multiple choice questions (both one best response and multiple true-false types).
- § Short Essay

##### **Clinical**

- § Actual patients in the hospital - Objective Structured Practical Examination (OSPE)
- § Interpretation and problem solving of laboratory data/patient data.

#### **End-Semester Examination**

Failure to appear for the end semester examination will result in grade "F". Students failing a course have to appear and pass the make-up examination/s to be promoted to next academic year.

A student who fails in one or more courses of the first/second /semester shall not be promoted to the next higher level.

Eligibility for appearing for university examination is 75% attendance.

A student will be permitted a maximum of four academic years to complete the M.Sc. Nursing program. A student who does not pass a course in three chances will be subject to academic dismissal from the program.

### **13.12 Examination Schedule**

Courses mentioned under each semester will be examined at the end of respective semesters

**13.13. Proposed Study Plan for MSN Nursing (2 years, 4 semesters)**  
**Total credit hours = Adult Health Nursing - 50**

FIRST YEAR											
SEMESTER 1	Course No.	Title	Theory	Practical	Clinical	SEMESTER 2	Course No.	Title	Theory	Practical	Clinical
	NTFN 102	Theoretical Foundations in Advance Nursing Practice	2	0	0		NARM 203	Advance Research Methods	3	0	0
	NAHA 104	Advanced Health Assessment	2	1	1		NNE 204	Nursing Education	3	1	0
	NSHP 102	Statistics for Health Professionals	2	0	0		NIPP 202	Issues in Professional Practice	2	0	0
	NOSL 424	Organizational & System Leadership	3	0	1		NNI 203	Nursing Informatics	2	1	0
	<b>Semester total</b>			<b>9</b>	<b>1</b>		<b>2</b>	<b>Semester total</b>			<b>10</b>

Semester 1= 12

Semester 2= 12

**Specialty: Adult Health Nursing**

SECOND YEAR											
	Course No.	Title	Credits				Course No.	Title	Credits		
			Theory	Practical	Clinical				Theory	Practical	Clinical
<b>Semester 3</b>	NAPP 303	Advanced path physiology	3	0	0	<b>Semester 4</b>	NRPS 402	Research Proposal Seminars	0	2	
	NAP 303	Advanced pharmacology	3	0	0		NT 404	Thesis	0	4	0
	NAHN 317	Adult Health Nursing-1	3	1	3		NAHN 427	Adult Health Nursing -2	3	1	3
	<b>Semester total</b>			<b>9</b>	<b>1</b>		<b>3</b>	<b>Semester total</b>			<b>3</b>

Semester 3 = 13 credits

Semester 4 = 13 credits

## 13.14 Summary of Courses for M.Sc. Nursing Program

### Semester I

#### **NTFN 102 Theoretical Foundations in Advance Nursing Practice (2-0-0=2)**

**Prerequisites:** None

The course utilizes the critical reasoning process to examine the element of nursing knowledge. Emphasis is placed on concept analysis and the evaluation of nursing theories. Identification of the links between theory and empirical indicators is examined.

#### **NAHA 104 Advance Health Assessment (2-1-1=4)**

**Prerequisites:** None

This course prepares the advanced practice nurse to conduct focused and comprehensive health assessments of clients across the lifespan. The process of diagnostic reasoning is emphasized as the primary means of collecting and analyzing data obtained from the client history, physical examination, and diagnostic procedures

#### **NSHP 102 Statistics for Health Professional (2-0-0=2)**

**Prerequisites:** None

This course provides students with the basic knowledge and skills to effectively use biostatistics in different research design and data analysis, and to understand articles in related professional journals. Topics include choosing correct statistical methods and study designs in nursing research and practice; descriptive statistics; probability and probability distributions; estimation and hypothesis testing, simple linear regression, introduction to analysis of variance

#### **NOSL 424 Organizational and System Leadership (3-0-1=4)**

**Prerequisites:** None

The complexities of the health care delivery system challenge the nursing profession to adapt to its demands. To be successful in that endeavor, a nurse must acquire a broad knowledge in nursing leadership and management. A Nurse Leader has to be competent to tackle issues in nursing services and the associated interdisciplinary functions and generate productive results. A Nurse Leader beginner or not, is faced with convoluted concerns from various areas of patient care and management. From staffing issues to provision of care, treatment, and services problems, conflict resolutions, assessment and evaluation of competencies, needs assessment, performance appraisals. Thus this course will enable them to demonstrate effective strategic assessment, planning, implementation, and evaluation of nursing care system and the disciplines that interact with nursing service.

## **Semester 2**

### **NARM 203 Advanced Research Methods**

**(3-0-0=3)**

**Prerequisites:** Semester I Courses

This course is an in-depth study of nursing research methodologies. The focus will be on the interrelationships among theory, advanced nursing practice, and research. Emphasis will be placed on developing skills used in critical analysis of nursing research for the purpose of determining applicability of the research to nursing practice

### **NNE 204 Nursing Education**

**(3-1-0=4)**

**Prerequisites:** Semester I Courses

The course is an overview of the classic and contemporary philosophies, theories and research about teaching and learning in nursing. Teaching and learning in schools of nursing, practice settings for the professional development of nurses and client (patient) education are primary foci of the course.

### **NIPP 202 Issues in Professional Practice**

**(2-0-0=2)**

**Prerequisites:** Semester I Courses

The student will analyze theoretical and pragmatic legal-ethical issues regarding professional nursing and health care. Emphasis is on an understanding of the nurse as a professional who embraces lifelong learning, incorporates professionalism into practice and internalizes the values of the profession.

### **NNI 203 Nursing Informatics**

**(2-1-**

**0= 3)**

**Prerequisites:** Semester I Courses

Integrates nursing science with computer technology and information science to identify, gather, process, and manage information. Emphasis on technology based health applications, which support clinical, administrative, research, and educational decision making enhancing the efficacy of nursing endeavors.

## **Semester: 3**

### **Nursing Specialty – Adult Health Nursing**

#### **NAPP 303 Advanced Pathophysiology**

**(3-0-0=3)**

**Prerequisites:** Semester II Courses

This course is an in-depth study of the pathophysiologic basis of disease as it affects individuals across the life cycle. Emphasis will be placed upon endogenous and exogenous environmental factors, which contributed to

altered functional balance at the cellular, tissue, organ, and system levels. The focus of this course is on mechanisms which cause aberrations resulting in dysfunction in the immune, neurologic, cardiovascular, and renal systems. Disease states commonly encountered in primary care settings and managed by primary care practitioners will be emphasized.

**NAP 303 Advanced Pharmacology** (3-0-0=3)  
**Prerequisites:** Semester I & II Courses

This course focuses on pharmacology and therapeutics used in the treatment of selected health conditions commonly encountered by the advanced practice nurse. Emphasis is placed on the decision making process utilized to safely and effectively prescribe and monitor pharmacotherapeutics appropriate to the client situation.

**NAHN 317 Adult Health Nursing-1** (3-1-3=7)  
**Prerequisites:** Semester I & II Courses

The course is designed to provide the registered nursing student with Baccalaureate nursing qualification, the opportunity to develop expertise and in depth knowledge in the field of Adult Health Nursing. It will help the students to develop skill to function as a specialized adult health nurse. Emphasis is given to the role of the nurse as a competent care provider, critical thinker, problem solver, educator, manager and researcher in the field of adult health nursing.

## **Semester 4**

**NRPS 402 Research Proposal Seminars** (0-2-0 =2)  
**Prerequisites:** Semester II Courses

Develop a research proposal seminar appropriate to the role of the advanced practice nurse such as an investigation of clinical phenomena, delivery systems, or cost effectiveness in a variety of health care settings. Present it to the research committee of the college for the approval of the title.

**NT 404 Thesis** (0-4-0=4)  
**Prerequisites:** Semester III Courses

The main focus of this course will be a faculty-guided thesis. This thesis will have a strong research component and will be a summative work. Students who do not complete the thesis in one semester may repeat for additional credits.

**NAHN 427 Adult Health Nursing - 2** (3-1-3=7)  
**Prerequisites:** Semester III Courses

The course is designed to provide the registered nursing student with Baccalaureate nursing qualification, the opportunity to develop expertise and in depth knowledge in the field of Adult Health Nursing. It will help the students to develop skill to function as a specialized adult health nurse. Emphasis is given to the role of the nurse as a competent care provider, critical thinker, problem solver, educator, manager and researcher in the field of adult health nursing.

## **14. Advisory Boards**

### **14.1 RAK College of Pharmaceutical Sciences**

#### **Advisory Board**

##### **Responsibilities**

- Advise the college with reference to its vision, mission, goals & objectives of post graduate programs.
- Oversee the college academic, industrial training, research & other outreach projects
- Assist to get collaborative projects & arrangements with external agencies especially hospitals, community pharmacies & pharma industries.
- Advise on fund raising, research projects & institution of chairs in the college with assistance of industries & other bodies

Consists of eleven members including VC who will be the chairman of the PGAB.

PGAB will meet once or twice in a year to conduct its deliberations.

- |   |                    |
|---|--------------------|
| 1. Vice Chancellor                          | - Chairman         |
| 2. Dean, RAKCOPS                            | - vice-chairman    |
| 3. Industry expert 1                        | - member           |
| 4. Industry expert 2                        | - member           |
| 5. Hospital Pharmacist 1                    | - member           |
| 6. Hospital Pharmacist 2                    | - member           |
| 7. Community Pharmacist 1                   | - member           |
| 8. Community Pharmacist 2                   | - member           |
| 9. Hospital Director (Saqr Hospital)        | - member           |
| 10. Hospital director (Obaidullah Hospital) | - member           |
| 11. PS coordinator (Faculty)                | - member secretary |

### **14.2 RAK College of Nursing**

#### **Advisory Board -**

##### **Responsibilities**

- Advise the college with reference to its vision, mission, goals & objectives of post graduate programs.
- Oversee the college academic, clinical training, research & other outreach projects
- Assist to get collaborative projects & arrangements with external agencies especially hospitals, PHC's and the community

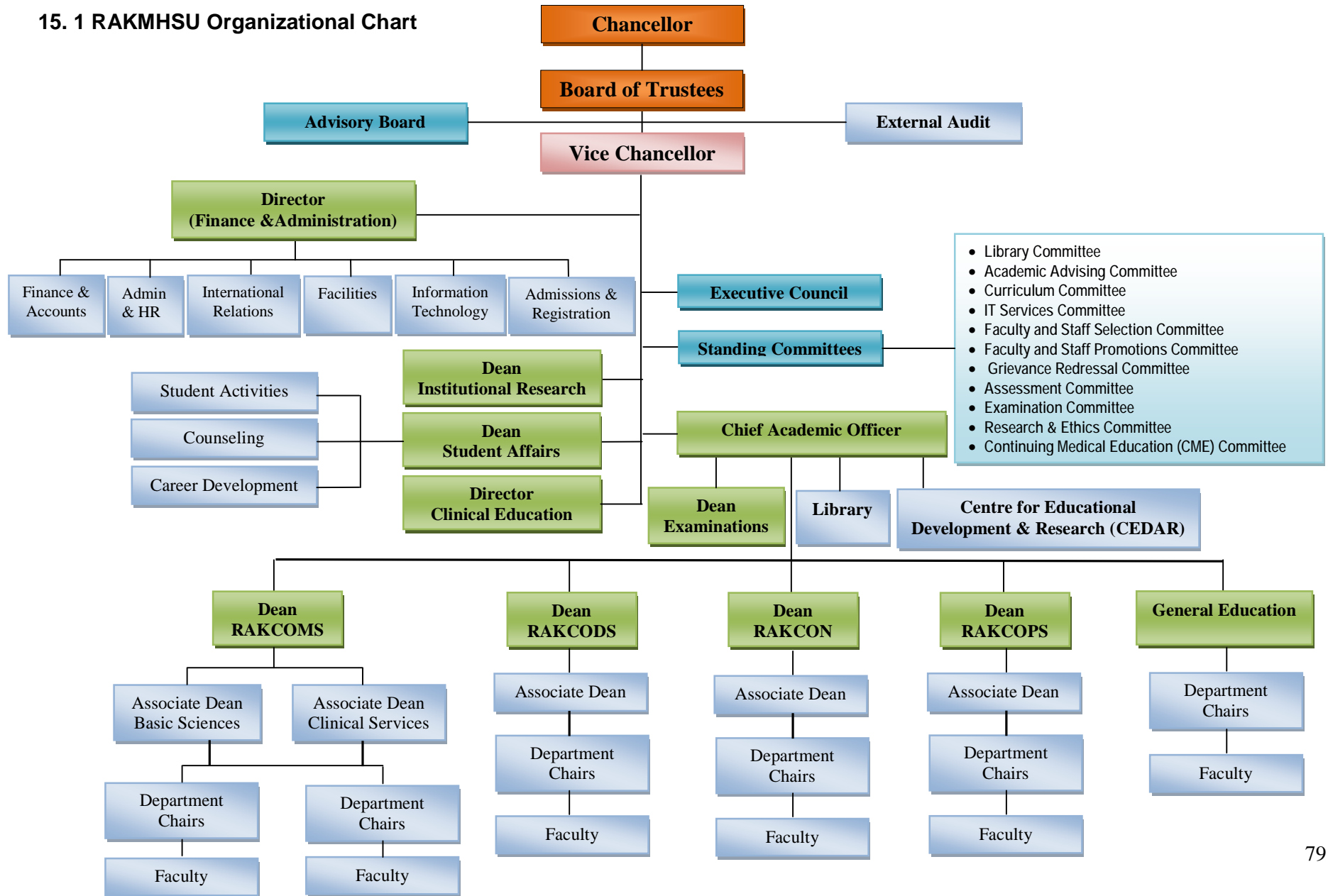
- Advise on fund raising, research projects & institutional chairs in the college with assistance of various agencies in the community.

It consists of eleven members, including VC who will be the chairman of the RAK CON AB. The board meets once or twice in a year to conduct its deliberations.

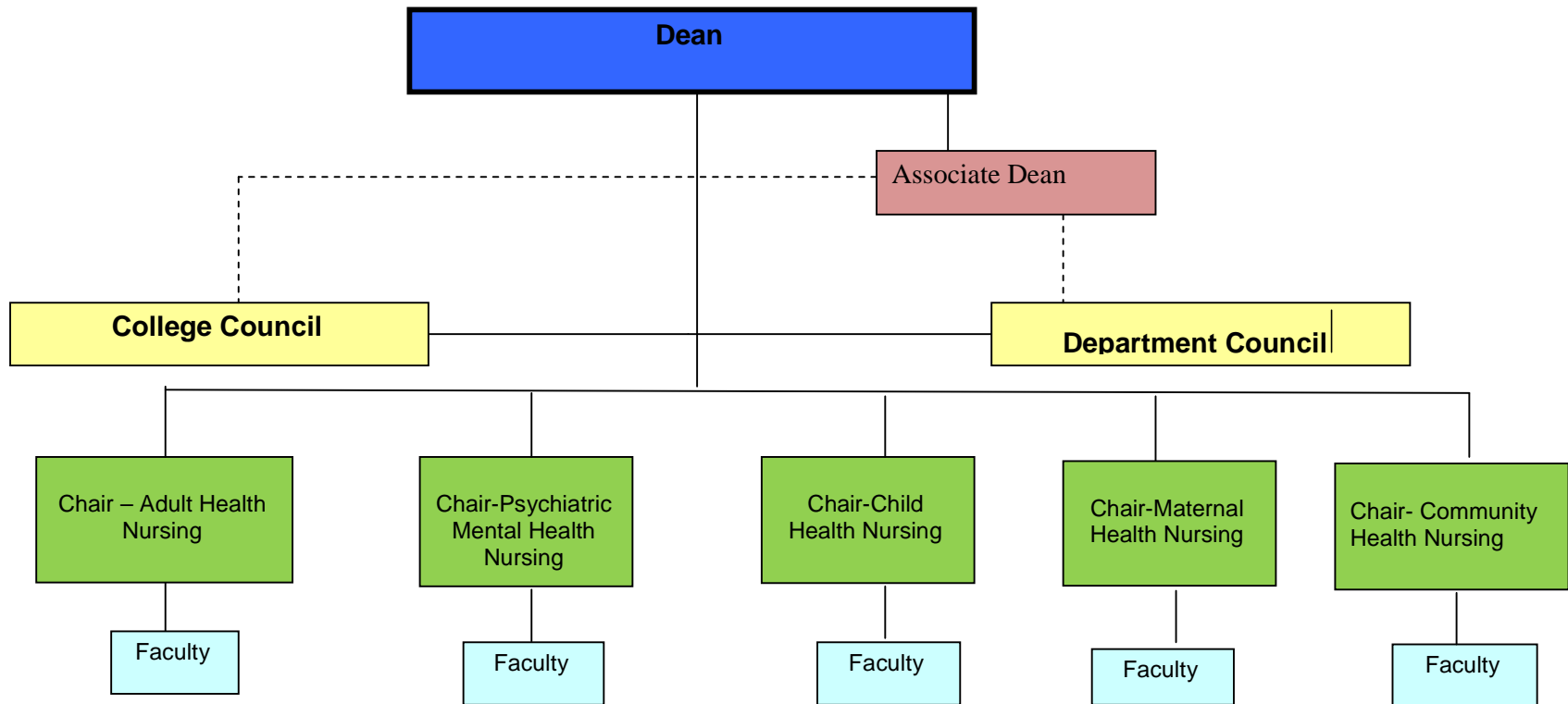
- |  |   |                  |
|--|---|------------------|
| 1. Vice Chancellor                           | - | Chairman         |
| 2. Dean, RAKCON                              | - | Vice-chairman    |
| 3. Nursing expert 1                          | - | member           |
| 4. Nursing expert 2                          | - | member           |
| 5. Director of Nursing RAK District          | - | member           |
| 6. Director of Nursing (Saqr Hospital)       | - | member           |
| 7. Director of Nursing (Obaidullah Hospital) | - | member           |
| 8. Director of Nursing (Dubai Hospital)      | - | member           |
| 9. Director of Nursing (Rashid Hospital)     | - | member           |
| 10. Hospital Director (Saqr Hospital)        | - | member           |
| 11. Hospital director (Obaidullah Hospital)  | - | member           |
| 12. MSN Program Coordinator (Faculty)        | - | member secretary |

# 15. Organizational Charts

## 15.1 RAKMHSU Organizational Chart



15.2 RAK College of Nursing Organizational Chart



## 16. Faculty Profile

### 16.1 RAK College of Pharmaceutical Sciences

Dr. Nagavi B.G.

Dean

B.Sc (1972), Bangalore University. India

B.Pharm (1976), Bangalore University. India

M.Pharm (1979), BITS Pilani, India;

Ph.D (1983), BITS Pilani, India,

PGDDE (2003), IGNOU, India; &

Dr. Padma GM Rao

Associate Dean

B.Pharm (1975), College of Pharma. Sciences. Trivendrum, India,

M.Pharm (1978), Manipal College of Pharma. Sciences, India

Ph.D - Pharmacy Practice (1997), Kasturba Medical College, Manipal, India,

Professional Diploma in Clinical Research (2004), Catalyst Clinical Services Pvt. Ltd., Delhi, India

Dr. Rafiq Redwan. A. Abou-Shaabani

Designation: Professor of Pharmaceutics

PhD

Dr. (Mrs.) Areeg Anwer Ali

Associate Professor, Pharmacology

B Pharma (1998), Saurashtra University, Rajkot, India

M. Pharma (Pharmacology) (2000), Hamdard University, New Delhi, India

Ph.D ( Pharmacology) (2005), Hamdard University, New Delhi, India

Dr. Amad M. Jamil Al-Azzawi

Assistant Professor

B.Sc (1993), Baghdad University, Iraq

M.Sc Pharmaceutical Organic Chemistry (2002),

Ph.D Pharmacognosy and Phytochemistry (2006),

Dr. Sirajunisa Talath

Assistant Professor

B.Pharm (1997), Luqman College of Pharmacy, Gulbarga, India

M.Pharm (2002), KLES's College of Pharmacy, Balgaum, India,

Ph.D Pharma & Chemistry (2007), NGSM, IPS, Mangalore, India,

Dr. Omar Abdulraheem Sarheed

Assistant Professor

B.Sc (Pharm) (2001), College of Pharmacy, University of Baghdad, Iraq

Ph.D Pharmaceutics & Pharmacy Practice (2008), University of Strathclyde, Glasgow, UK;

Dr. Sathvik B. Sridhar

Assistant Professor

B.Pharm (1996)  
D.Pharm (1991) Bangalore University India, Professional diploma in clinical research: Delhi, India  
M.Pharm (Pharmacy Practice) (1999), Rajiv Gandhi Health Sc. Univ. Bangalore, India;  
Ph.D (Pharmacy Practice) (2008)

Dr. Bhoomendra Atmaram Bhongade  
Assistant Professor  
B.Pharm (1995), Nagpur University, India  
M.Pharm - Pharm. Chem (1997), Karnataka University, Dharwad, India;  
Ph.D (Pharmacy) (2006): Rajiv Gandhi Health Science. University, Bangalore

Ms. Smitha C. Francis  
Lecturer  
B.Pharm (2003), Kerala University, India  
M.Pharm (2007), Kerala University, India

Mrs. Fasiha Walayat Shah  
Lecturer  
B.Pharm (2002), Peshawar University, Pakistan  
M.Phil (Pharmaceutics) (2007), Punjab University, Pakistan;

Mrs. Jayachithra  
Instructor  
B.Pharm (1997), MGR University , India  
M.Pharm (2004), Rajiv Gandhi University of Health Sciences, India;

Mr. Jinesh B. Nagavi  
Instructor  
B.Pharm (2007): Rajiv Gandhi Univ. of Health Sciences, India  
M.Pharm (2009), Rajiv Gandhi Univ. of Health Sciences, India

## **16.2 RAK College of Nursing**

Dr. Vijaya Kumardhas  
Dean  
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