MPharm

## Clinical Pharmacy

Gatalog

2021-2022

"Dubai Pharmacy College for Girls located in the Emirate of Dubai is officially licensed from 07/02/2016 to 20/01/2021 and Accredited with effect from November 2019 by the Ministry of Education - Higher Education Affairs of the United Arab Emirates to award the postgraduate degree in the Master of Pharmacy in Clinical Pharmacy"

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Praise be to Allah who taught man what he did not know and guided His servants through knowledge to the path of piety and obedience to Him. He Himself says in the Holy Book: Only those of his servants who are endowed with knowledge truly fear Allah. (35:28). And Allah's peace and blessing be upon Prophet Muhammad who taught humanity all things good, and guided it to righteousness and piety.



H.H. Shaikh Khalifa Bin Zayed Al Nahyan President of the United Arab Emirates



H. H. General Shaikh Mohammad Bin Rashid Al Maktoum Vice President and Prime Minister of the United Arab Emirates and Ruler of Dubai



H. H. Shaikh Hamdan Bin Mohammed Bin Rashid Al Maktoum Crown Prince of Dubai



Haji Saeed Bin Ahmed Al Lootah (1923-2020)
The Founder of Dubai Pharmacy College for Girls

Founder **Haji Saeed Ahmed Al Lootah** is famous for his diverse and successful business ventures, non-profit educational institutions, entrepreneurship, veracity as well as its profound dedication to corporate citizenship and sustainable development. His success spans across key business sectors from construction, real estate and energy conservation, to financial services, applied research, ICT, education, hospitality, media and healthcare among others.

With the enduring values of education, cooperation and economy, which set the foundations of his work, Dubai Pharmacy College was established in 1992. The first pharmacy college, accredited by the Ministry of Higher Education and Scientific Research, UAE, is the result of single-minded dedication of this great visionary.

His earlier educational ventures of importance and repute are- The Islamic School for Training and Education, Dubai Medical College for Girls, Dubai Institute for Environmental Research and Dubai Medical Centre for Treatment and Research.

Thanks to his vision and leadership, Dubai Pharmacy College continues to demonstrate unique values that extend well beyond its functional benefits creating greater economic, social and environmental benefits for people in the United Arab Emirates and beyond.

## PREFACE: an insight into Dubai Pharmacy College for Girls



Prof. Dr. Saeed Ahmad Khan Dean, Dubai Pharmacy College for Girls

Dubai Pharmacy College for Girls has been committed to leading in education in pharmacy and Haji Saeed Ahmed Al Lootah established offering BPharm degree since it in 1992. In recognition, our College is accredited and licensed by the Ministry of Higher Education – Higher Education Affairs, UAE since 1998. Around the globe we have more than 1000 alumni well placed or working towards higher degree in the US, UK, Canada, India, Syria, Egypt, Sudan - this stands a testimony to all our accomplishments. It is also endowed with the Dubai Quality Appreciation Award in 2004. With increasing demands of in industries and hospitals, this is a highly demanding time for specialized pharmaceutical services

DPCG is taking privilege to commence Master of Pharmacy degree program to match the need of the hour and to avail you with best educational and research experience to entail you to be a leader in pharmaceutical profession. You are commencing your professional education at a particularly exciting time for pharmacy and you will be in the vanguard of new developments and models of professional practice.

Over the next two years of the study, you will gain comprehensive understanding and skills required for you to succeed in your specialized career. These range from the development of drug formulations in the pharmaceutical industries through to patient-facing clinical roles in hospital, primary care and community sectors.

The modern facilities provided in the classrooms and, teaching and research labs would be a solid atmosphere for you and every aspect of the teaching and learning processes which will be continuously assessed to ensure that you are learning and instructors are teaching appropriately. Students, with the help of faculty advisors, will prepare *Research Project* portfolio to showcase their academic rigor and document their progress in mastering the program's educational outcomes.

Dubai Pharmacy College for Girls is proud of its tradition of friendly atmosphere. We welcome all of you who have a strong will to fulfill your dreams as competent and successful healthcare providers.

I wish you good luck with your studies.

1. A Chan

#### **HISTORY of DUBAI PHARMACY COLLEGE for GIRLS**

The great visionary and philanthropist Hajj Saeed Bin Ahmed Al-Lootah founded Dubai Pharmacy College for Girls in September 1992. It was created under the umbrella of Dubai Institute of Environmental Research, with the goal of establishing itself as a state-of-art institute in pharmaceutical education and research.

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1992 1992-'93:	Dr. Mizra Beg, Director (DIER) was in charge. Dr Saeed Ahmad Khan was appointed as the Head of Educational Unit.  The first batch of 27 students (16 girls and 11 boys) were enrolled.		
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1993	Prof. Fawzi Taha Ktob from Alexandria University took charge as the Dean.		
1994-′95:	To provide internship to students DPCG tied-up with Dubai Govt. Hospitals and Julphar Pharmaceutical Industry; for an internship program for the students.		
1996	April: Submission of the Form-A to the Ministry of the Higher Education and Scientific Research for the Accreditation process.		
1996	October: Prof.J.S. Qadry was appointed as the Dean of the College.		
1996	December: Graduation of the First Batch of Pharmacists.		
1997	October: A team of experts from U.S.A visited the College to evaluate various facilities. A report was submitted to MOHE&SR.		
1998	December: Got the approval and accreditation from the Ministry (MOHE&SR) as per its decree No (151) of 1998. The decree has authorized the College to award its graduates an approved degree of B.Pharm. Along with accreditation and deemed University status.		
2001	February: Delegates from MOHE&SR revisited the College. The encouraging report was given. They also stressed that the College should start a Pharm.D.Degree program.		
	August: Prof. Sobbi Ali Said took over as Dean		
	-Dr. Saeed Ahmad Khan was appointed as Chief Academic Officer		
	-Revised and updated syllabus and curriculum.		
2004	Awarded the Dubai Quality Appreciation Award for being the Best Teaching Institute in the UAE.		
2007	February: Dr. Saeed Ahmad Khan was appointed as the Dean.		
	Initiated the open lecture series 'Pharmatalk- Share and Inspire', providing a platform for sharing best practices.		
	Introduced advanced courses; Pharmacogenomics, Pharmaceutical Technology, Instrumentation Techniques, Clinical Testing Methods, Alternative and Complementary Medicines and Clinical Pharmacy, Pharmacoepidemiology.		
	Initiated Journal Alert Forum (JAF) to bring in awareness of E-Journals, which resulted in periodical seminar presentations.		
2008	Renovation of total infrastructure of the College, administration offices, faculty and staff offices, lecture rooms, the computer labs with all facilities.		
	Major curriculum revision was done with the inclusion of newly revised assessment methods.		
	New Administration Units and Committees were formed.		
	Training in Global Pharmaceutical laboratories for student of the fourth year.		
2011	DPC Newsletter, a monthly publication, was initiated with the aim of sharing experience and information covering news, events, faculty achievements and creative talents of students.		
2013	This year is a proud moment in the history of Dubai Pharmacy College for Girls (DPCG) as the Master's Program got initial accreditation from the Ministry of Higher Education and Scientific Research, UAE; for two specializations: Clinical Pharmacy, and Pharmaceutical Product Development.		
2015	Certificate course introduced in Drug Regulatory Affairs		
2016	Awarded the GCC Pharma Outstanding Education Award.		
	Re-accreditation for BPharm program by the Ministry of Education – Higher Education Affairs, UAE		
2017	Introduced additional Certificate courses – Pharmacy Licensing and Pharmacovigilance		
2018	Selected among 10 best valuable institutes in the UAE.		
	Masters program was fully accredited by the Ministry of education – Higher Education Affairs, UAE.		
	Education Leadership Award for Dean, Prof Saeed Ahmed Khan		
	New research lab and labs for MPharm were designed in the DPCG extension in an adjacent building.		
	The infrastructure of the library was enhanced to include newly-built study rooms to facilitate student learning.		
2019	MoU with University of Strathclyde, United Kingdom to provide students in DPCG to pursue postgraduate/doctoral studies.		
	DPCG signed an MoU with Manipal Academy of Higher Education (MAHE - Dubai)		
2020	DPCG signed an MoU with Universitas 17 Agustus 1945 Jakarta, Indonesia		

#### Vision and Mission

#### Vision

"To serve the healthcare community by nurturing competent and professional pharmacists while promoting a learning environment that fosters innovation, leadership, continued professional development and quality assurance, making DPCG one of the leading institutions for the pharmacy education in the world."

#### Mission

"DPCG is committed to provide accredited pharmacy education at undergraduate and graduate level to female students based on Islamic values, advancement of pharmaceutical knowledge through research and community service in order to serve pharmacy profession, scientific community and public."

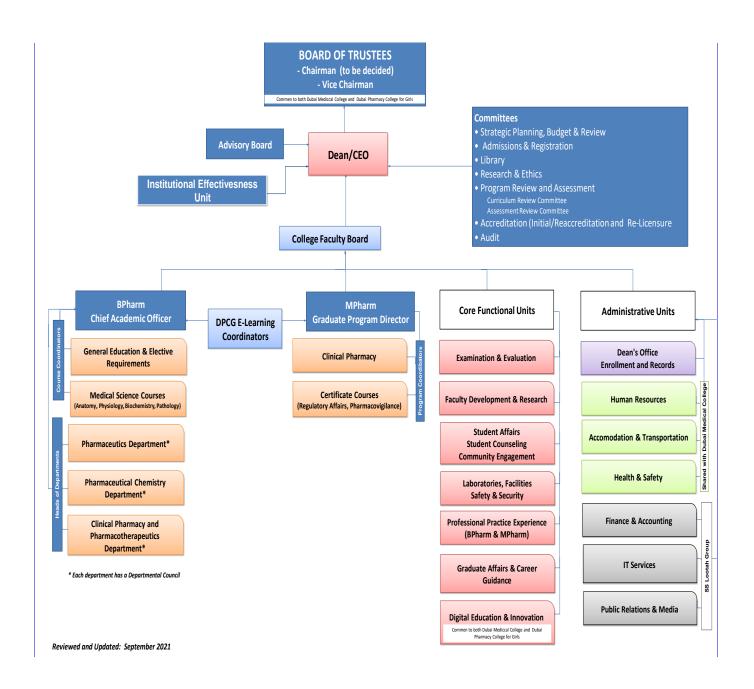
#### **Accreditation and Licensure**

Dubai Pharmacy College for Girls offers the following degrees:

- **I.** Bachelor of Pharmacy
- **II.** Master of Pharmacy\* with specialization in
  - Clinical Pharmacy

All the programs are accredited by the Commission for Academic Accreditation (CAA), Ministry of Education – Higher Education Affairs, UAE.

#### **Organizational Structure**



#### 1. Program Details

INSTITUTION: Dubai Pharmacy College for Girls, Dubai, UAE DEGREE: Master of Pharmacy in Clinical Pharmacy

LENGTH & MODE: Two academic years, Full time

MINIMUM REGISTRATION PERIOD: 2 years
MAXIMUM REGISTRATION PERIOD: 3.5 years

Program Coordinator Prof. Mirza Baig

#### 2. Admission Requirements

Admission to the Graduate School is based on academic qualifications as shown in Table below. Prospective students can find information on application procedures as well as a link to the application at the college web site at <a href="https://www.dpc.edu.lnquiries">www.dpc.edu.lnquiries</a> concerning particular degree programs or courses of instruction should be addressed to the graduate program director or to the Dean.

Entry requirements	BPharm		
Other qualifications			
accepted			
Minimum average %	CGPA of 3 on a scale of 4.0, or its equivalent		
of marks			
English Language	• Internet Based Test (IBT) TOEFL 79 out of 120. TOEFL (PBT) will not be		
proficiency	accepted.		
requirements	International English Language Testing System (IELTS-Academic) 6.0		
	The Emirates Standardized Test (EmSAT) with a test score range of 1400-		
	1525		
	Exceptions are:		
	1. A native speaker of English who has completed her undergradua		
	education in an English-medium institution and in a country where		
	English is the official language;		
	2. 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 her undergraduate Program. To be eligible for this exemption you		
	must have completed your studies no more than two years prior to the		
	start of the postgraduate degree program for which you are applying.		
Entry eligibility	Passing an interview		

Applications are initially reviewed by the college and applicant will be called for an interview. Final decisions rest with the college, which, after considering the recommendation of the department concerned, will notify the applicant of the decision.

#### **Conditional Admission**

Students recognized Bachelor's degree and an EmSAT score of 1250 or its equivalent on another standardized test approved by the CAA, such as TOEFL score of 530 (197 CBT, 71 iBT), or 5.5 IELTS

academic are provided conditional admission to the MPharm program based on the below stated conditions. Such a student must meet the following requirements during the period of conditional admission or be subject to dismissal:

- a. must achieve an EmSAT score of 1400 or equivalent, by the end of the student's first semester of study;
- b. may take a maximum of six credit hours in the first semester of study, not including intensive English courses;
- c. must achieve a minimum CGPA of 3.0 on a 4.0 scale, or its established equivalent, in the first six credit hours of credit-bearing courses studied in the MPharm program;

A student with a recognized baccalaureate degree with a grade point average of 2.50 on a 4.0 scale or its established equivalent may be admitted conditionally to the Master's program. Such a student must meet the following requirements during the period of conditional admission or be subject to dismissal:

- a. may take a maximum of nine credit hours in the first semester of study
- b. must achieve an overall grade point average of 3.00 on a 4.0 scale in the first nine credit hours for the Master's program

#### **Transfer Admission**

Dubai Pharmacy College for Girls (DPCG) accepts transfer of students from accredited College with a curriculum that is comparable to that offered at DPCG. The transfer of students is not allowed after second semester. The following are the necessary conditions for transfer to the DPCG from other pharmacy colleges

- 1. Students must meet the English language proficiency requirements such as minimum TOEFL score of (79 IBT) or 6.0 in IELTS.
- 2. DPCG requires applicants to submit their transcripts for evaluation of transferable subjects /teaching hours from previous college experiences. The student must provide a letter of application to the Dean of the College specifying reason(s) for requesting transfer and desired date of transfer.
- All applicants must provide conduct certificates from the Pharmacy College where they are currently enrolled. No student who has been dismissed from any Pharmacy College will be eligible for transfer to DPCG.
- 4. The student transferring from another accredited college must be in a good academic standing (CGPA of 3 on a scale of 4.0, or its equivalent) in BPharm.
- 5. The student must have earned a grade of "B" or better in the course. No more than six credit hours of graduate work may be transferred from another institution. The courses must be graduate level and have been taken for graduate credit at the accredited institution.
- 6. The Dean will make the final decision for approval of transfer after review of the transfer request. .

#### **Advanced Standing**

At the moment DPCG does not accept any form of non-degree certificates, non-credit courses or advanced high school subjects as an equivalent to any of the credit hour courses offered at any one of the DPCG accredited programs. In case, a student with exceptionally advanced standing applies we will forward it to the commission for a final approval.

#### **Recognition of Prior Learning**

RPL does not apply to MPharm (CP).

#### **Graduate Student Readmission:**

Students returning from a **Leave of Absence** will need to fill out a readmission form available in the Dean's office.

#### **Deadline for Readmission:**

Readmission form must be submitted on or before the start of the term/semester.

Students returning from a **Leave of Absence** who have a tuition balance are subject to the rules regarding overdue tuition balances in place at that time. After one year, students will have to re-apply for admission.

#### Leave of Absence:

Students in good standing may request a **Leave of Absence**. A leave of absence allows a student to return to the same semester at any registration period for up to one year from the start of the leave without the necessity of re-applying but should fill in the Leave of Absence form. Students on scholarship who are in good academic standing will retain their award when returning to the College from a leave of absence not more than one year. The forms for readmission are available in the Dean's office.

#### **Add/Drop/Withdrawal from Courses**

As DPCG strictly adheres to the time-table schedule, the graduate students cannot add or drop any regular courses allotted for each semester.

#### **Withdrawal Policy**

Up to the end of the 10<sup>th</sup> week of a semester, students may choose to withdraw from a course without academic penalty; however, a grade of **W** will appear on the student's transcript. Students may officially withdraw from a course up to the end of the 10<sup>th</sup> week of the semester. After the 10<sup>th</sup> week, withdrawals are no longer permitted, except by special permission of the Dean. A withdrawal form must be signed by the Dean. **Note:** All withdrawals from course(s) after the fourth week of the term are noted with a grade "**W**" on the transcript.

#### **Online Registration:**

New applicants should follow the steps below to register online:



New applicants will be shortlisted and contacted. If you have any questions regarding the system, or should you encounter problems while using the system, call the college reception during office hours.

#### 3. Student Intake and Fee Structure

Student Intake	Minimum enrollment of 5 students not exceeding 15 students in total for both the specialization.			
Fees	Total Amount/Year	Mode of Payment		
Tuition	Dhs50,000/-per year (+5% VAT applicable)	Dhs25,000/- at time of admission		
Hostel	Dhs12000/- to 18000/-	Four installments with tuition fees.		
Transportation (+5% VAT applicable)				
Dubai(daily)  Sharjah/Ajman(daily)	Muhaisna/Mezher/Mirdiff/Rashidiya/Twar/Qusais /Nahda - Dhs3000/- Deira/Bur Dubai/Satwa/Karama/Umm Suqaim/Jumeirah/Barsha - Dhs4000/- Dhs 5000/-	Four installments with tuition fees.		
AbuDhabi, Fujairah, Al Ain, Baniyaas (weekly)	Dhs 5000/-	Four installments with tuition fees.		

#### **Refund Policy of Tuition Fees**

Dubai Pharmacy College for Girls admits only a very limited number of students, so if any student after admission cancels her admission then this will create a vacancy which could have been used by another qualified student. Therefore, the College authorities are strict in their action for such students and they will not refund the fees paid at the time of admission until and unless a valid reason is provided for cancellation of admission. The valid reasons can be: -

- 1. If a candidate faces visa difficulties from U.A.E. govt. that are out of College Control.
- **2.** If the guardian of the candidate faces sudden employment problems, such as termination, visa cancellation etc.
- **3.** If a candidate is granted a scholarship provided that it occurs after the date of fee payment.

The refund usually is granted to student in first or second week after commencement of academic year to which they are admitted.

Refund requests should be made at the Registration office through a written request enclosing the ID card and original fee receipt. Refunds will be made after clearance of dues, if any. The amount paid is construed as your booking the seat for yourself in the college. The refund policy applicable is as follows:

In the case of withdrawal before joining the college	5% (applicable only on tuition fees )	
For every month of attendance in case of withdrawal after joining the college:		
Master of Pharmacy	AED 5000	

#### 4. MPharm (Clinical Pharmacy) Program Details

#### VISION:

To thrive for innovative clinical pharmacy services in this region by enhancing drug therapy outcomes to the individual and the society, through competent graduates of M.Pharm program.

#### MISSION:

The mission of M.Pharm-Clinical Pharmacy Program is to develop and qualify competent clinical pharmacist through excellence in enhanced pharmaceutical care, patient education, and research by working in a healthcare team with their exemplary professional and advanced public services.

#### 4.1 Basic Information

**Program title:** Master of Pharmacy (Clinical Pharmacy)

**Program duration:** 2 years

Teaching Institution: Dubai Pharmacy College for Girls Dubai, UAE

**Department(s) responsible:** Department of Clinical Pharmacy and Pharmacotherapeutics **Delivery Site:** Dubai Pharmacy College for Girls/Dubai Health Authority Hospitals, Cleveland Clinical Abu Dhabi, Iranian Hospital Dubai, GMU Hospital, MOHAP approved

clinical sites.

Coordinator: Prof. Mirza Baig, Dept. of Clinical Pharmacy & Pharmacotherapeutics

#### 4.2 Program Objectives

The program is intended to:

- 1. Establish improved concepts of clinical pharmacy in therapeutic practice and promote well-being.
- 2. Educate scholarly and scientific endeavors that translate the clinical pharmacy profession into a wider health care community.
- 3. Develop an indispensable resource in providing precision medication in patient care.
- 4. Become a most respectable and trustworthy health care provider through patient advocacy.
- 5. Produce clinical pharmacists capable of providing specialized pharmaceutical services in hospital and other clinical environments.
- 6. Enhance the pharmacists' role as a member of the healthcare team by improving their communication, managerial, clinical and research skills.
- 7. Provide learning opportunities to enable to think critically and to further develop as an autonomous and lifelong learner.

#### 4.3. Program Outcomes

Program outcomes of MPharm (Clinical Pharmacy) program are specifically aligned with the Level 9 of the Qualifications Framework for the UAE approved by The Board of the National Qualifications Authority (NQA) known as the QF*Emirates*.

#### A. Knowledge: On completion of the M. Pharm. program, the graduates will be able to:

- **A.1.** Demonstrate specialist and comprehensive knowledge required in providing specialized Clinical services required in hospitals and other clinical environments.
- **A.2.** Comprehend the ethical, legal and quality principles of professional practice in clinical pharmacy practice.

## **Learning/Teaching methods**Lectures, tutorials, office hours, seminars

**Methods of Assessment**Written & Oral exams. OSCE Case
Presentations

#### B. Skills: On completion of the M. Pharm. program, the graduates will be able to:

- **B.1.** Identify, analyze, deploy and utilize appropriate information in clinical case discussion and evaluate the pharmaceutical care required for the case.
- **B.2.** Critically evaluate the available literature in the field of clinical pharmacy for the evidence-based medicine.
- **B.3.** Demonstrate effective project management skills.
- **B.4.** Communicate effectively orally and in writing and deploy a range of presentation techniques and strategies to present, explain and critique information within workplace settings.

#### **Learning/Teaching methods**

PBL, Clerkships Research project, Assignments, Case studies, seminars, Demonstrations

#### **Methods of Assessment**

OSCE, Assignments, Case presentations, Problem based learning, Presentations, Dissertation evaluation & defense

#### **C. Competences:** On completion of the M. Pharm. program, the graduates will be able to:

#### Autonomy and responsibility

- **C.1.**Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level through clerkship and research project.
- **C.2.** Demonstrate ability to use skills to make decisions in complex situations where there are several factors that require analysis, interpretation and comparison.

#### **Self-development**

- **C.3.** Practice self and continuing professional learning through reference books, published data, scientific publications and websites and attendance of seminars, workshop and conferences.
- **C.4.** Utilize and contribute to the available scientific literature in the field of clinical pharmacy and pharmacy practice.

#### Role in context

- **C.5.** Deal with complex issues both systematically and creatively, make sound judgments in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences
- **C.6.** Interact with professional colleagues and demonstrate team-working and leadership abilities in various professional contexts.

#### Learning/Teaching methods

PBL, Clerkships, Research project Assignments, Case studies, online software, seminars, Demonstrations

#### **Methods of Assessment**

OSCE Assignments Case presentations Problem based learning, Computer Based Test, Presentations Dissertation evaluation & defense

#### 4.4 Curriculum Requirements (Credit hours (CH)

First Semester: 9 CH

Second Semester: 11 CH

Third Semester: 10 CH

Fourth Semester: 10 CH

**TOTAL: 40 CH** 

#### 4.5 Graduation Requirements

MPharm degree will be awarded to students who successfully complete all the requirements of graduation. The requirements of the graduation are:

- 1. She should pass all the courses both theoretical and practical as per assessment and grading rules of the college.
- 2. She should successfully complete required clerkships in hospitals approved by college.
- 3. She should complete a major research project and successfully defend it in front of panel of external and internal examiners appointed by college.
- 4. She should secure overall CGPA (Cumulative Grade Point Average) of 3 (80%) in all the above mentioned in 1, 2 and 3.
- 5. In all such cases, maximum duration of 3.5 years is allowed upon recommendation of the Graduate Program Director and permission from the Dean.

#### 4.6 Study Plan

FIRST YEAR					
I. First Semester					
Course Code	Course	Proroquicito	Contact hours/week		Credit
Course Code	Course	Prerequisite	Lecture	Case studies	hours
CP901	Clinical Pharmacy Practice		2	-	2
CP902	Pharmacovigilance		1	-	1
CP903	Clinical Pharmacokinetics		2	-	2
CP904-1	Pharmacotherapeutics-I		3	2	4
Total Credit Hours					9
II. Second Semester					
<b>Course Code</b>	Course	Prerequisite	Contact	hours/week	Credit
			Lecture	<b>Case studies</b>	hours
CP904-2	Pharmacotherapeutics-II		3	2	4
CP904-3	Pharmacotherapeutics-III		2	-	2
CP905	Pharmacoeconomics		1	-	1
CP906	Clinical Pharmacology		2	-	2
CP907	Clinical Research Methodology & Biostatistics		2	-	2
			Tota	l Credit Hours	11

SECOND YEAR				
Major Clerkship		Prerequisite	Duration	Credit
			(weeks)	hours
CPC-IM-C	Internal Medicine		4	2
CPC-ID-C	Infectious Diseases		4	2
CPC-PD-C	Pediatrics		4	2
CPC-ICM-C	Intensive Care Medicine		4	2
CPC-S-C	Surgery		4	2
CPC-OG-C	Obstetrics & Gynecology		4	2
Minor Clerkship (Any two)			Duration	Credit
			(weeks)	hours
CPC-PSY-E	Psychiatry		2	1
CPC-TDM-E	Therapeutic Drug Monitoring		2	1
CPC-DIS-E	Drug Information Service		2	1
CPC-TPN-E	Total Parenteral Nutrition		2	1
CPC-AC-E	Ambulatory Care/ Community		2	1
	Pharmacy			
Research Project & Dissertation [CP-RP] CP907				6
Credit hours (Total)	)	<u> </u>		20

#### **4.7 Course Descriptions**

#### CP901: CLINICAL PHARMACY PRACTICE (2 CH, First Semester)

#### **Course Coordinator: Prof. Mirza Baig**

This course introduces to the concepts and abilities required for a clinical pharmacist in relation to interpersonal skills and their responsibilities for caring and respecting the patients' needs and beliefs. Legal and ethical issues are also discussed in this course. The student works with and discuss real and complex patient cases with a focus on drug-related problems, while highlighting the need for continual professional development. Pharmacist Interventions, wider public health issues, and the awareness of guidelines are also studied to reflect the changes which occur in drug development and disease management.

#### CP902: PHARMACOVIGILANCE (1 CH, First Semester)

#### Course Coordinator: Dr. Ritu Pahuja,

This course covers the principles of Pharmacovigilance methodology, reporting of adverse drug reactions, identifying the sources and documentation of Individual Case Safety Reports (ICSRs), medical dictionary (MedDRA) and Medical aspects in Pharmacovigilance, safety monitoring in Clinical Trials and signal detection.

#### **CP903: CLINICAL PHARMACOKINETICS (2 CH, First Semester)**

#### Course Coordinator: Prof. Aliasgar Shahiwala

This course is designed to provide students with various important aspects of basic concepts & principles of pharmacokinetics with special emphasis on clinical applications. Principles of clinical pharmacokinetics will be thoroughly covered with special emphasis on pharmacokinetic variability, therapeutic drug monitoring, individualization of drug therapy, kinetics of drug interaction and pharmacokinetic approach to new drug discovery.

#### CP904-1: PHARMACOTHERAPEUTICS I (3+1 CH, First Semester)

#### Course Coordinator: Dr. Doaa Kamal, Ms. Eman Shamselddin,

The aim of this course is to provide the students with the knowledge of the pathophysiology, clinical presentations, pharmacology of drug classes used for disease management (pharmacokinetics, pharmacodynamics, drug/drug interactions, dosage calculations, and adverse effects), treatment algorithm, and goals of therapy and patient education of: 1) Cardiovascular, 2) Endocrine and 3) Gastroenterology disorders.

#### CP904-2: PHARMACOTHERAPEUTICS II (3+1 CH, Second Semester)

#### Course Coordinator: Dr. Ammar Ali Saleh Jaber, Ms. Eman Shamselddin

The aim of this course is to provide the students with the knowledge of the pathophysiology, clinical presentations, pharmacology of drug classes used for disease management (pharmacokinetics, pharmacodynamics, drug/drug interactions, dosage calculations, adverse effects), treatment algorithm, goals of therapy and patient education of: 1) Infections, 2) Oncology, 3) Hematological, 4) Renal, and 5) Respiratory disorders.

#### CP904-3: PHARMACOTHERAPEUTICS III (2 CH, Second Semester)

#### **Course Coordinator: Dr. Doa Kamal**

This course covers the pathophysiology, clinical presentations, pharmacotherapy of drug classes used for disease management (pharmacokinetic, pharmacodynamics, drug/drug interactions, dosage calculations, adverse effects), treatment algorithm, goals of therapy and patient education) of Rheumatology, Immunology disorders, Neurology disorders, Psychiatric disorders, and dermatovenerology and also expose the students to current epidemics.

#### CP905: PHARMACOECONOMICS (1 CH, Second Semester)

#### Course Coordinator: Prof. Mirza Baig

This course covers the introduction of pharamcoeconomics, need and practice of pharmacoeconomic analyses in drug management, basic types of pharmacoeconomic analyses, drug utilization studies. This course also covers the description of measuring quality-adjusted life years (QALYs) and analysis of costs.

#### CP906: CLINICAL PHARMACOLOGY (2 CH, Second Semester)

#### **Course Coordinator: Dr. Hanan Anbar**

The aim of this course is to cover the advanced understanding of various Special aspects topics which deals with Immunosuppressive Agents, clinical uses of Immunosuppressive Drugs, Immunologic Reactions to Drugs & Drug Allergy. Diagnosis and staging of cancer is also covered with special aspects on cancer chemotherapy.

This course also includes study of advanced concepts in prenatal, pediatric and geriatric pharmacology. During the course, students will learn to make selected clinical decisions regarding using current, reliable sources of information, understanding of pharmacokinetics and pharmacodynamics, developmental physiologic considerations, monitoring and evaluating the effectiveness of drugs and the management of poisoned patients

### <u>CP907: CLINICAL RESEARCH METHODOLOGY AND BIOSTATISTICS (2 CH, Second Semester)</u> <u>Course Coordinator: Dr. Ammar Ali Saleh Jaber</u>

This course is the integration of epidemiological and biostatistical techniques with an emphasis on applications to clinical research (including study design, bias and confounding, hypothesis testing, confidence intervals, sample size calculations, and introduction to parametric and nonparametric test). Students will gain practical skills in developing a research project and in carrying out data analyses.

#### <u>Clinical Clerkships (14 CH, Third & Fourth Semester)</u>

Clinical clerkship is for 28 weeks each during third and fourth semester, during which students will be assigned primarily to clinical rotations in different hospital departments of Dubai Health Authority approved facilities. Each student's experience will include total four weeks each on Internal medicine, Infectious diseases, Pediatric care, Intensive Care, Surgery, Obstetrics & Gynecology, and a two-week block on any two of the following Selection:

Psychiatry
Drug Information Service
Therapeutic Drug Monitoring
Total Parenteral Nutrition

☐ Ambulatory Care/Community Pharmacy

#### Research Project & Dissertation (6 CH, Third (3CH) & Fourth (3CH) Semester)

After successful completion of didactic courses in year one in Dubai Pharmacy College for Girls (DPCG), Students are required to go for clinical clerkship rotation in Hospitals in Year two. During their training, students are required to conduct a publishable research for a minimum of 12 weeks in clinical, hospital or community related topics. The research project must exhibit original investigation, analysis and interpretation. All the senior academic staff of Clinical Pharmacy and Pharmacy Practice unit will be involved in supervising the M. Pharm Clinical pharmacy postgraduate students in their research as part of the curriculum. Students are required to prepare a proposal for their research/review topic. If the project involves interaction with the patients or patient data then they are required to apply for institutional ethical approval in DPCG. They are also required to get an approval from DHA/MOH, if the data collection site is in DHA/MOH hospitals. Students utilize hospital databases, library databases to conduct the research/reviews. Students have to submit the report at the end of Clerkship training and have to do final presentation of the research to fulfill the requirement of Master of Pharmacy (Clinical Pharmacy) program.

#### 4.8 Faculty for MPharm (Clinical Pharmacy)

Faculty	Degrees	Institution	Year
Prof. Mirza Baig Head, Clinical Pharmacy and Pharmacotherapeutics Professor in Clinical Pharmacy	PhD (Clinical Pharmacy)	University Science Malaysia	2011
Prof. Kishore Gnana Sam Professor in Pharmacy Practice Clinical Pharmacy Consultant in DMU Hospital	PhD (Pharmacy Practice)	Manipal University of Higher Education	2009
<b>Dr. Ammar Ali Saleh Jaber</b> Assistant Professor in Clinical Pharmacy	PhD (Clinical Pharmacy)	University Science Malaysia	2018
<b>Dr. Doaa Kamal</b> Assistant Professor in Clinical Pharmacy	M.Pharm PhD-Clinical Pharmacy	IIUM, Malaysia	2019
<b>Dr. Hanan Sayed Mohamed El Said Anbar</b> Assistant Professor in Pharmacology	Ph.D. degree in Pharmacology and Toxicology	University of Mansoura, Egypt.	2017
Dr. Tasneem Sandozi Professor & Head Department of Pharmacology Dubai Medical College UAE.	MBBS, Postgraduate (MD) in Pharmacology	Gandhi Medical College, Hyderabad, India.	1999- 2001
Prof. Aliasgar Shahiwala Professor, Department of Pharmaceutics	PhD. (Pharmacy) Postdoctorate	Maharaja Sayajirao University of Baroda University (India) Northeastern University (USA)	2005 2007
	TEACHING ASSISTANT		
Ms. Eiman Shamselddin Assistant Lecturer in Clinical Pharmacy	MPharm (Clinical Pharmacy)	Dubai Pharmacy College (UAE)	2016
Ms. Maram Omar Abbas Teaching Assistant in Clinical Pharmacy	MPharm (Clinical Pharmacy)	Dubai Pharmacy College (UAE)	2021
	ADJUNCT FACULTY MEMBERS		
Prof.Dr. Ali Sayeed Hussain PhD Clinical Pharmacy	Professor, Department of Clinical Pharmacy & Pharmacotherapeutics, Director-Pharmaceutical Services, Dubai Health Authority		
<b>Dr. Ritu Pahuja</b> PhD Clinical Pharmacology AIIMS, INDIA	Assistant Professor, Department of Clinical Pharmacy & Pharmacotherapeutics		
<b>Dr.Suhaila Mohammed Shareef Alawadhi</b> PhD Clinical pharmacy, Pharmacogenetic- Curtin University of Technology, Australia	Adjunct Professor, Department of Clinical Pharmacy & Pharmacotherapeutics		

#### 5.Methods of Instruction

The classrooms at DPCG are equipped with updated technologies such as interactive white board, seminar aids, speaker, and clickers. The laboratories at DPCG are well equipped with latest equipment and instruments in performing Lab work and conducting research.

#### Different methods used in teaching and learning during the program:

#### **Didactic Courses**

Didactic courses will be taught through different strategies such as Lectures; laboratory classes; tutorials; problem-based learning, self-directed learning, assignments and seminars.

#### Seminars

All the students are required to participate in their respective specialization's seminar program. The graduate faculty members for respective specialization will grade seminars courses. The grade will be assigned based on the quality of the student's seminar presentation and their attendance throughout the semester. Faculty and graduate students will complete an evaluation sheet for each student's seminar so that the student presenter can also receive specific comments on presentation style and content.

#### **Problem Based Learning (PBL)**

In PBL, students engage in complex, challenging problems and collaboratively work toward their resolution. Students spend a great deal of time discussing the problem, generating hypotheses, identifying relevant facts, searching for information, and defining their own learning issues. This fosters collaboration among students, stresses the development of problem-solving skills within the context of professional practice, promotes effective reasoning and self-directed learning, and is aimed at increasing motivation for life-long learning.

#### **Self-directed learning**

Self-directed learning is fostered library services providing an extensive range of textbooks and access to electronic journals and other online resources.

#### **Office Hours**

Office hours are available where a face-to-face exchange of information between student and course coordinator/instructor. Students can clarify their doubts which they feel reluctant to speak up in class.

#### Dissertation

Third and Fourth semester of the program are devoted to dissertation work. The student's research supervisor holds the primary responsibility for providing the appropriate guidance and counsel essential to the scholarly development of the student.

#### **Clinical Clerkship**

During third and fourth semester of M.Pharm (clinical pharmacy and pharmacy practice), students will be assigned primarily to clinical rotations in different hospital departments of Dubai Health Authority (DHA) approved facilities supervised by clinical preceptors.

#### **6.**Academic Offences

Students must share the responsibility for creating and maintaining an atmosphere of honesty and integrity. Students should be aware that personally completing assigned work is essential to learning. Students who are aware that others in a course are cheating or otherwise committing academic dishonesty have a responsibility to bring the matter to the attention of the faculty.

#### Academic dishonesty includes,

- □ **Plagiarism:** The adoption or reproduction of ideas or words or statements of another person without due acknowledgment.
- ☐ **Fabrication:** The falsification of data, information, or citations in any formal academic exercise.
- Deception: Providing false information to an instructor concerning a formal academic exercise—e.g., giving a false excuse for missing a deadline or falsely claiming to have submitted work.
- ☐ **Cheating:** Any attempt to give or obtain assistance in a formal academic exercise (like an examination) without due acknowledgment.
- **Sabotage:** Acting to prevent others from completing their work. This includes cutting pages out of library books or willfully disrupting the experiments of others.

#### Academic Misconduct include,

- **a)** The actual or attempted tampering or misuse of academic records or materials such as transcripts and examinations.
- **b)** Stealing, buying, or otherwise obtaining all or part of an unadministered test or academic exercise;
- c) Selling or giving away or engaging in bribery to get all or part of an unadministered academic exercise or any information about it;
- **d)** Changing or altering a grade book, test, or other official academic records of the College;
- **e)** Entering an office without authorization for the purpose of changing a grade or tampering in any way with grades or examinations.

Instances of academic dishonesty and misconduct will be reported to the Dean. The Dean will form a Disciplinary Committee comprising of senior faculty members of the College who will investigate the type of academic honesty and misconduct committed by the student. Depending upon the level of each mentioned above the penalty will be imposed by the Disciplinary committee which is subjected to Dean's approval. The decision of the Dean will be final. The report of academic dishonesty or misconduct will be filled in the student's advisory file.

Penalties that can be imposed by the Disciplinary committee include In the case of taught modules:

- ☐ Setting aside the component or assignment concerned and requiring you to complete it as if for the first time
- ☐ Failure of the component. You will be reassessed and the mark capped if appropriate and not disproportionate in effect
- ☐ Failure of the component and the module. You will be reassessed in the module.
- ☐ Expulsion, to incorporate failure of any and all assessments or examinations taken during that session.
- ☐ Failure of that academic year (or specified part thereof) and the student to retake its assessments, with or without attendance.
- □ No marks to be awarded in relation to the specific material which is the subject of the academic offence (thus leading to a reduced overall mark for the piece of course work, dissertation, examination question or examination script in which the specific material appears).
- A mark of zero for the entire piece of course work, dissertation, examination question or

	examination script in which the academic offence has occurred.
	A mark of zero for the entire course in which the academic offence has occurred.
	Award a mark of zero for all the assessments in the semester.
	award a mark of zero for the whole year
	require the student to take reassessments (as a result of being awarded zero marks) in the following session before being allowed to progress or complete their course
П	require the student to enroll on courses in which they need to take reassessments (as a result of

require the student to enroll on courses in which they need to take reassessments (as a result of being awarded zero marks) in the following session before being allowed to progress or complete their course

#### In case of research work:

- ☐ Require a research student to resubmit a dissertation.
- ☐ Require a research student to register for a period of supervision before being allowed to resubmit a dissertation.
- ☐ Withdraw the award of a degree or other qualification from, and issue an amended transcript.

#### 7. Assessment

Assessment on the MPharm degree program is a mixture of formative assessments (in form of coursework) and summative assessments (written & practical examinations).

#### **Didactic Course Assessment:**

Each taught course is assessed by 30-40 per cent coursework, 60-70 per cent exam (mid-term exam, final written, and lab exam) with exceptions for the courses required different evaluation format.

The coursework mark is derived from a series of assignments, which assess your ability to synthesize information from various sources into reasoned reports. Coursework varies from course to course and comprises a mix of Practical write-ups, Patient profiles, written reports and essays, small group projects, oral presentations, quizzes etc. Course coordinator will provide Coursework submission guidelines & grading criteria (usually in form of rubric).

Mid-term exam scheduled during the semester and final written and Lab examinations are scheduled at the end of first and second semester. Exams are normally closed book, though a calculator is permitted in some exams. In order to assess all learning outcomes, all the questions are compulsory in exams.

Exams usually combine MCQ section, short answers, and longer essay-type questions.

#### **Dissertation & Defense Assessment:**

The assessment of the dissertation work is based on dissertation and defense at the end of the fourth semester. Dissertation is assessed based on the dissertation and defense with 60% and 40% marks respectively.

#### **Clerkship Assessment:**

Clerkship is assessed based on clerkship evaluation (continuous) and final evaluation (case presentation and written report) with 60% and 40% marks respectively.

#### 8. Grading System

Grading at the graduate level is intended to offer feedback to students on their performance in a given course, including once students reach the dissertation and dissertation stage. Faculties are encouraged to specify course requirements and grading expectations for students. Students are assigned grades (letters) for each course, which 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:

Range of Marks	Grade Point	Evaluation	Grade Symbol
95 - 100	4	Outstanding	A+
90 – 94.99	3.75	Excellent	А
85 – 89.99	3.50	Very Good	B+
80 – 84.99	3.00	Good	В
75 – 79.99	2.50	Satisfactory	C+
70 – 74.99	2.00	Pass	С
65 – 69.99	1.5	Unsatisfactory	D+
Below 65	Failed	Failed	F
Administrative Codes			
-	Incomplete		
-	Withdraw		W

#### Computation of the Cumulative Grade Point Average (CGPA) and Grade Point Average (GPA)

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 in a semester. The CGPA is calculated by multiplying the grade of each course by the number of its credit hours and dividing the total of all courses by the number of total credit hours taken for all semesters. Both GPA and CGPA are rounded to the nearest decimal units. GPA and CGPA are calculated according to the following formula:

- GPA = Total (credit hours per course x grades received per course) for all courses taken in one semester /
  Total credit hours for all courses taken in one semester
- CGPA = Total (credit hours per course x grades received per course) for all the courses taken in all semesters

  / Total credit hours for all the courses taken in all semesters

GPA / CGPA	Evaluation
4.00-3.90	Outstanding
3.89-3.75	Excellent
3.74 - 3.50	Very Good
3.49 - 3.25	Good
3.24-3.00	Satisfactory
Less than 3.00	Unsatisfactory

#### **Incomplete Grades**

A student who is unable to attend the final exam of any course because of extenuating circumstances such as serious illness, accident or death of a family member during the final examination period seeks an incomplete grade "I" for the course. **8.1. Teaching Pedagogy and Scheme of Assessment appended** 

#### 9. Progress Policy Guidelines

#### **Satisfactory Progress**

• A student must maintain a semester GPA of 3.00 to be considered making satisfactory progress.

#### **Probation**

- Students who fail to achieve GPA of 3.0 (80%) in taught semesters (first and second) will be put on probation and will be allowed to appear in the supplementary exams held in February and September each year for first and second semester. Students need to repeat the courses with grades lower than C. If she again fails to obtain the GPA 3.0 (80%), then second and last attempt will be given. Failing to improve the grades even after repeating the course(s) will lead to the dismissal from the program.
- Students are allowed to take second semester with condition that no prerequisite courses have grades lower than C. No students are promoted to second year (dissertation work and/or clinical clerkships) unless she secures minimum GPA of 3.0 in both first and second semester.
- Students who fail to secure at least 80% marks in clerkships, have to repeat the respective clerkship during next six months. If the student again fail to secure at least 80% marks in clerkship, she will be withdrawn from the college.
- Students who fail 80% marks for their research project will not graduate. However, the student has the option to revise and resubmit a failed dissertation. If the student does not contact Graduate Program Director requesting to revise and resubmit the dissertation within the designated 4 weeks' time period or, once approved to revise the dissertation, does not re-submit the revised dissertation by the 6 months deadline, the dissertation will be deemed to have failed and the student will be withdrawn from the university. Should the re-examination fail to pass the dissertation, the dissertation will be deemed to have failed the examination process and the student will be withdrawn from the college.

#### 10. Student Appeals Policy

Every student has right to put across her appeal within fifteen days. The appeal is addressed to the Dean. If it is not resolved properly then the student can appeal to higher authorities of the College Administration. The decision given by them will then be considered as the final decision. Appeals are limited to requests to continue in the MPharm program after being dropped from the program for academic reasons and dissatisfied course grades.

#### 11. Students Grievance Policy

#### **Informal Resolution:**

Any student in DPCG who believes that she has been treated inequitably is encouraged to resolve the matter informally. The student should first talk with the person or group at whom the grievance is directed in an attempt to resolve the issue informally.

#### **Grievance Procedure:**

The grievance procedure is described below.

- **1.** To initiate the formal grievance procedure, the student must submit her grievance, in writing, to the Dean of DPCG.
- **2.** The written grievance shall include:
  - **a.** a statement that the student wishes a review of the situation by a Grievance Committee.
  - **b.** the identification of the person or group at whom the grievance is directed;
  - **c.** the specifics of the perceived inequitable treatment;

- **d.** evidence in support of the student's belief that she has been treated inequitably.
- **3.** A grievance must be initiated no later than 15 calendar days from the time the student knew or could reasonably have been expected to have known of the circumstances giving rise to the grievance.
- **4.** After receiving the grievance the Dean will study the case with the Disciplinary Committee of the College.
- **5.** After inquiry, the report shall be notified to the Student about the action on the grievance and the grounds for the action taken.
- **6.** If the grievance is not resolved properly then the student can appeal to higher authorities of the College Administration. The decision given by them will then be considered as the final decision.

#### 12.Student Rights & Responsibilities

#### **Statement of Student Rights and Responsibilities**

Every student who enrolls at DPCG has a right to a student-centered education, research and services. Students should positively contribute to the safe learning environment by maintaining high standards of integrity and academic honesty at the same time familiarizing themselves with and adhere to all policies and regulations of the College.

#### **Student Rights**

For a registered student in Dubai Pharmacy College the rights are:

- **1.** To obtain pharmacy education according to a well-established educational program and in a suitable educational environment.
- **2.** To attend theory and practical classes regularly and to participate in scientific discussions held in the class as directed by the faculty.
- **3.** To participate in all students activities sponsored by Student Union.
- **4.** To benefit from facilities offered by the College such as library, hostel, transportation and others.
- **5.** To get the identity card issued annually from the College after payment of its fees in order to prove that she is a student in the College.
- **6.** To appear in all examinations and evaluations conducted according to the regulations of the College.
- **7.** To get health care facility in case of emergency and first aid only. The College will not be responsible for expenses of treatment in any case and only transportation can be provided to and from medical clinics in Dubai.
- **8.** To get social care services offered by the College.
- **9.** To have a residence visa sponsored by the College for hostel students as per the rules. The student will bear all expenses for her residence visa.
- **10.** To get the following certificates from the College:
  - a. An annual certificate to prove that she is studying in the College
  - **b.** A certificate to prove her academic level which she obtained as per the College records
  - **c.** A certificate for the expenses required for her College study
  - **d.** A certificate for her good behavior and discipline in the College
  - e. A graduation certificate after she fulfills all the requirements needed for graduation as per College rules
  - **f.** A release certificate from the College

**Note:** All the certificates mentioned above in (10 a to f) should be issued as per the College rules and also according to the requirements of the student. The first copy of all certificates issued will be free ofcharge. If

the student needs another copy then it will be given by charging a nominal fee fixed by the College. But photocopies (like the original) of certificates will be given free of charge.

#### **Student's Responsibilities**

The duties of the students are:

- 1. To do her best to achieve the goals set by the College as mentioned in the regulations of the College.
- **2.** To do her best to achieve high level of scientific and educational standard. To achieve the desired level, she should not hesitate in taking help from the administration, the Dean and staff members of the College so that there is no hindrance in her way.
- **3.** To follow all the rules and regulations of the College for academic and scientific activities.
- **4.** To participate positively in evaluating the College development and performance by giving advice and written suggestions to the College administration in the questionnaire annually or by other means.
- 5. To handle all the properties of the College like instruments, equipment etc., carefully.
- **6.** To be cooperative in adopting all the College principles especially the following:
  - (a) To wear the legal Islamic Hejab
  - **(b)** To be punctual in offering prayers
  - **(c)** To maintain good relationship with her colleagues
- **7.** To inform the College administration or the Dean about misbehavior or any mistakes committed by any student, which may give bad reputation to the College.
- **8.** To pay the fees regularly as required by the College.

#### 13.Education Support Facilities

#### **COLLEGE BUILDING**

The College building, on the ground floor has five laboratories, a model pharmacy with a drug information center, administrative and faculty offices, a meeting room and a reception section. On the first floor, are housed three laboratories, four lecture rooms, student's union office, students' common room, and chemical and glassware store. The animal house is located in a building adjacent to the College.

Besides the above facilities, the College is supported by a Machine Room (Industrial unit) situated in the Lootah's Educational Campus for conducting training and practical in Pharmaceutics-I & II and Pharmaceutical technology courses.

#### LABORATORY AND INSTRUMENTATION FACILITIES

DPCG possesses well-equipped laboratories for each discipline. There are eight laboratories in the College premises equipped with scientific apparatus and equipment required for practical and scientific investigations. Some laboratories are in Dubai Medical College and are common to both the Colleges. The laboratories are:

Dubai Pharmacy College for Girls							
Ground Floor	First Floor						
Pharmaceutics Laboratory	Research Laboratory						
Instrumental Analysis Laboratory							
DPC Extension	Dubai Medical College						
Pharmaceutical Chemistry Laboratory	Microbiology Laboratory						
Pharmacology Laboratory	Anatomy Laboratory						
Pharmacy Practice Laboratory	Biochemistry Laboratory						
Advance Research Laboratory	Pathology Laboratory						
	Physiology Laboratory						

#### **BIOSTATISTICS LABORATORY**

Students have access to Biostatistics laboratory situated in the adjacent building to DPCG equipped with computers and which have licensed software IBM SPSS 26 integrated.

#### **AUDITORIUM**

A well-furnished auditorium, located in DMCG, is spacious and suitable for any cultural occasion. It has become a regular venue for all social and cultural activities of DPCG.

#### **LIBRARY**

The Library is situated in the adjacent building. Students have access to computer terminals to search on-line catalogs, databases, and other information systems. The library is also equipped with photocopying machines. Look out for library updates on the LMS platforms and college website.

#### **Opening hours:**

Sunday - Thursday	7.30am – 3.00pm
Friday	8.00am – 1.00pm
Saturday	9.00am – 3.00pm

#### LEARNING MANAGEMENT SERVICES

As a member of DPCG, students will have access to Learning Management System (LMS). At DPCG the LMS is managed by D2L, an integrated set of tools designed to support e-learning activities. Students are encouraged to use the LMS platform to gain access to teaching, learning and assessment activities.

#### **COMPUTER LABORATORY**

The Computer Laboratory is well equipped with adequate facilities The I.T. department provides technical support throughout the year to faculty, administrative staff and students. The laboratory which is well is freely available for use. It is monitored by well qualified staff to render help and assistance.

#### **DRUG INFORMATION CENTER (DIC)**

The Drug Information Center has been established along with Model Pharmacy in the College to acquaint the students with the role of DIC for answering questions of health care team and also to acquaint them with the needs required to initiate self-community pharmacy or hospital pharmacy DIC. It also provides information to students on pharmaceutical or medical topics which help them to write projects, essays, review articles for seminars and research.

The DIC of the College has thirty three computers, internet, primary literature, CD-ROMS and also reference books like USPDI, Martindale, PDR and Internal Medicine, and BNF.

#### **ACCOMMODATION FACILITIES**

DPCG provides hostel facility for students who apply for it. The hostel is close to the College. It has well-furnished bedrooms, dining room, study room and all the required facilities. Besides these facilities, internet connection is available in each room to aid them in preparing their notes and seminars. On each floor of the hostel there is a provision for praying and a gymnasium club. Students can obtain advice on accommodation from the hostel Supervisor.

#### **HEALTH CARE FACILITIES**

The College arranges to provide health care facilities to students living in the hostels. DPCG has a contract

for health care with its sister organization Dubai Specialized Medical Centre.

#### STUDENT COUNSELING SERVICES

Many students sometimes experience personal, emotional and social difficulties and may need counseling or support. DPCG provides students with counseling services through a trained student counselor who helps them to cope up with a wide variety of student matters.

#### TRANSPORTATION FACILITIES

DPCG has special minibuses for transporting students from Sharjah, Ajman, Dubai and hostel. These buses are fully air-conditioned and quite comfortable. They are used for field trips and educational tours too.

#### **MOSQUES**

The College has mosques inside its campus for faculty, staff and female students which sustains the Islamic atmosphere in the College.

#### **CAFETERIA**

Cafeteria adjoining the College is spacious and hygienic. It offers food and beverages of students' choice. Thus it's a rendezvous for students to relax and enjoy during breaks.

#### **RECREATIONAL FACILITIES**

In the campus there is a swimming pool, basketball court and gymnasium club. These facilities help the students in maintaining proper physical fitness.

#### **BOOKSHOP**

There is a bookshop in the College which sells textbooks at subsidized rates of various subjects taught in the College. The bookshop also provides services on photocopying at a minimal charge.

#### 14. Students' Support Services

#### STUDENTS COUNSELING SERVICES

DPCG provides students with counseling services through a trained student counselor. She provides personal counseling to the students concerning their personal, social and moral problems, which may cause hindrance in the way to the students' success. The personal counseling to students is provided by prior appointment with the Counselor during the College working hours. Periodically, group counseling sessions are also arranged in each academic year. The announcement of such sessions, giving the time, date and venue, is made via the college bulletin boards. Make it a habit to attend these counseling sessions on the due dates.

#### ACADEMIC ADVISING AND MENTORING

Students are allotted a faculty member for academic advising / mentoring. The Faculty-Advisor who is assigned to a study-group of students; guides in matters pertaining to their study plan, student development, the curriculum and other academic affairs. The advisor helps the student to organize her study plan, supervises its implementation, and assists her in overcoming any difficulties related to it.

Faculty-Advisor identifies students making unsatisfactory progress in each class and remedial classes are arranged to improve their GPA. He/She also advises the student about the introduction of credit hour system and its requirements for graduation to obtain Degree in Pharmacy. Faculty Advisors will maintain a student record based on student's dress code, attendance in classes, academic performance (GPA/ CGPA) and conduct in College. They also provide information about programs, services, facilities and involvement

opportunities that support academic success and lifelong learning, which facilitate responsible life choices, and promote awareness of self and community. It has specific mission but one common goal: to provide academic advising, outreach and support.

#### STUDENTS CAREER PLANNING SERVICES

DPCG provides career counseling to its students regarding career information and planning, career development, testing and prospective job placement. DPCG also provides assistance to develop different skills necessary to start a career in various Pharmaceutical settings.

Career Guidance sessions at DPCG are provided to the 4th year BPharm and 2nd year MPharm students on individual basis with prior appointment with one of the personnel; Dean, Head of Alumni Affairs / Head of Professional Practice Experience Unit. They guide the students about the availability of the opportunities to help them decide on their future plans. They will serve to ensure the:

- 1. Preparation for MOH exams.
- 2. Self-improvement program for career development.
- 3. Availability of Jobs in different fields of Pharmacy practice.
- 4. Counseling for postgraduate and further studies.

In addition, Career guidance or counseling in groups is also provided regularly.

#### STUDENT UNION

There is a "Students' Union" consisting of members from student community elected from all years of BPharm and MPharm. The elections are held regularly at the beginning of each academic year. The Student Union serves as the principal student programming organization at DPCG. It is responsible for providing a balanced program of social, religious, recreational and cultural activities for the College, aiming to make free time activity a cooperative facet with study. The Student Union also helps to maintain close links between the College administration, faculty, and the students which are essential for efficient functioning of the College.

#### 15. Glossary of Terms

#### **Program**

The set of courses and other formally established learning experiences which together lead to a qualification

#### Curriculum

The term refers to a set of related courses constituting an area of specialization, such as the MPharm (Clinical Pharmacy) curriculum.

#### Credit hour and the credit system

The academic credit provides a basis to measure the amount of engaged learning time expected of a typical student. A credit, or credit hour, is a unit of measurement defining the student's overall effort towards attaining a qualification.

1 credit hour equals approximately 1 hour of time in class per week over a semester of 15 weeks or longer. It is assumed that a student spends two hours outside of class in independent learning or specific course assignments for every hour in class. For laboratory and case studies, 1 credit hour equals 2 hours of case discussions and lab work respectively.

#### **Pre-requisite**

It refers to each course which is found necessary for each student to complete successfully before being

allowed to register in a subsequent one.

#### Semester

A semester is a period of time, typically a minimum of 15 weeks, during which an institution offers courses.

#### Course

A course consists of a number of instructional activities over a prescribed period of time. It deals with a single subject and is commonly described by title, number, credits, and expected learning outcomes.

#### **Electives**

Electives are the courses which are not compulsory for students. Electives may be free—selected by the student from any course offerings, or restricted—chosen from a pre-determined list of options. For example, students of MPharm (Clinical Pharmacy) program have to select two clinical clerkships out of five areas.

#### **Clinical Clerkship**

A course of clinical medical training in a specialty (Internal Medicine, Infectious Diseases, Pediatric care, Intensive Care, Surgery, Obstetrics & Gynecology) that usually lasts a minimum of four weeks each compulsory clerkship and minimum of two weeks elective clerkship and takes place during the third and fourth semester of MPharm (Clinical Pharmacy) program established by cooperation between college and local hospitals

DPCG Academic Calendar- Acade	emic Year 2021-202	22 (1443)				
Fall Seme	ester					
Event	Day	Dates	Date / Hijri			
Beginning of 1st Semester for 2 <sup>nd</sup> , 3 <sup>rd,</sup> and 4 <sup>th</sup> years	Sunday	29/08/2021	21-01-1443			
Orientation & Beginning of MPharm Clinical Pharmacy 1st Semester classes	Friday	03/09/2021	26-01-1443			
Beginning of 1st Year classes and Welcome Ceremony	Sunday	Sunday 05/09/2021				
Beginning of Final Exams of 4th year	Sunday	5/12/2021	01-05-1443			
Beginning of Final Exams for 1st, 2nd, and 3rd years	Sunday	12/12/2021	08-05-1443			
Winter Vacation	Sunday to Saturday	26/12/2021 to 08/01/2022	22-05-1443 to 05-06-1443			
Beginning of Final Exams for M. Pharm 1st & 3rd Semester	Friday	07/01/2022	04-06-1443			
Beginning of Re-sit Exams for 1st, 2nd and 3rd years	Sunday	9/01/2022	06-06-1443			
End of First S	-					
Spring Sen	nester					
Beginning of 2nd Semester for 1st, 2 <sup>nd</sup> , 3 <sup>rd</sup> and 4th years	Sunday	9/01/2022	06-06-1443			
Commencement of Classes for M. Pharm 2nd Semester	Friday	04/02/2022	03-07-1443			
Beginning of Final Examination of 4th year	Sunday	13/03/2022	10-08-1443			
Spring Vacation	Sunday to Saturday	27/03/2022 to 02/04/2022	28-04-1443 To 01-09-1443			
Beginning of Hospital Training for 4 <sup>th</sup> year Batch 27	Sunday	03/04/2022	02-09-1443			
Beginning of Final Examinations for 1st, 2nd and 3rd years	Sunday	15/05/2022	14-10-1443			
Beginning of Final Exams for M. Pharm 2nd Semester	Friday	03/06/2022	04-11-1443			
Summer Se	mester					
Beginning of Summer Semester for 1st, 2nd and 3rd years	Sunday	5/06/2022	06-11-1443			
Beginning of Final Examinations for 1st, 2nd and 3rd years	Sunday	26/06/2022	27-11-1443			
Beginning of Re-sit Exams for 1st, 2nd and 3rd years	Sunday	3/07/2022	04-12-1443			

**Summer Vacation Begins** 

18-12-1443

17/07/2022

Sunday

Events					
Event	Date				
Prophets Birthday*	Friday 8 <sup>th</sup> October 2021				
Martyr's Day	Wednesday, 1st December 2021				
UAE National Day	Thursday and Friday 2 <sup>nd</sup> - 3 <sup>rd</sup> December, 2021				
New Year's Day	Saturday, 1st January, 2022 –during winter break				
Farwell Party for Fourth year students	2 <sup>nd</sup> or 3 <sup>rd</sup> week of March, 2021				
Eid Al Fitr Holiday*	30 April, 2022				

<sup>\*</sup> **Note**: Islamic holidays are determined after sighting of the moon. Thus actual dates may not coincide with the dates in the calendar

<sup>\*\*</sup>Beginning of Academic Year 2022-2023 will be on Sunday 28th August, 2022

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											Teachi	ng Ped	lagogy	/								As	sessm	ent To	ols				
														Sr		5	б				ς.	ţ					Prac	tical	
Code	Courses	Lecture	Practical	Clerkship	Research	Total Units	Lectures	Practical	Tutorial	Seminar	Computer Lab	Class Activity	PBL	Wideo demonstrations	Case Study	Small Group Discussion	 Self-directed learning	Quizzes/CBT	OSCE	PBL assessment	Attitude & Behaviour	Case based assessment	Assignment	Presentation	Project Report/GCP	Mid Semester	work	oral	Final Exam
CP901	Clinical Pharmacy Practice	2	-			2	√		√			√		√	√	√	√	20	50		5	10	15						
CP902	Pharmacovigilance	1	-			1	√		√	√		√		√			√	30			5		20	10					35
CP903	Clinical Pharmacokinetics	2	-			2	√		√	√	√	√		√	√		√	30						10					60
CP904-1	Pharmacotherapeutics-I	3	1			4			√		√	√	√	√	√	√	√	20		30	5			10					35
CP904-2	Pharmacotherapeutics-II	3	1			4	√		√		√	√	√	√	√	√	√	20		30			10	5					35
CP904-3	Pharmacotherapeutics-III	2	-			2	√		√	√		√		√	√	√	√	20			5	10	20	10					35
CP905	Clinical Pharmacology	2	-			2	√		√			√		√			√	25			5		15	20					35
CP906	Pharmacoeconomics	1	-			1	√		√			√		√			√	20			5	15	25						35
CP907	Clinical Research Methodology & Biostatistics	2	-			2	√		√	√	√					V	√	40					20	20	20				-
CPC-IM-C	Internal Medicine					2		√							√	√	√				10			20	10		60		
CPC-ID-C	Infectious Diseases					2		√							√	√	√				10			20	10		60		
CPC-PD-C	Pediatrics					2		√							√	√	√				10			20	10		60		
CPC-ICM-C	Intensive Care Medicine					2		√							√	√	√				10			20	10		60		
CPC-S-C	Surgery					2		√							√	√	√				10			20	10		60		
CPC-O&G	Obstetrics and Gynaecology					2		√							√	√	√				10			20	10		60		
CPC-PSY-E	Psychiatry					1		√							√	√	√				10			20	10		60		
CPC-TDM-E	Therapeutic Drug Monitoring					1		√							√	√	√				10			20	10		60		
CPC-DIS-E	Drug Information Service					1		√							√	√	√				10			20	10		60		
CPC-TPN-E	Total Parenteral Nutrition					1		√							√	√	√				10			20	10		60		

# CLINICAL CLERKSHIP & GRADUATION PROJECT

#### Introduction

The primary goal of the clerkships is to provide an experiential learning environment which will assist our students to become confident, caring, with the ability to think critically and apply their knowledge and skills in the best interest of their patients regarding individualized pharmacotherapy planning, intervention and outcome evaluation.

The clerkships program is designed to guide the trainee to gain the proper understanding of pharmaceutical care concepts, to decide their choice of clinical specialty, to continue successfully in their lifelong learning and practice and to meet their responsibilities to patients and the society.

#### Structure

For M. Pharm in clinical pharmacy specialization, clinical clerkship is obligatory. Clinical clerkship is for 14 weeks each during third and fourth semester, during which students will be assigned primarily to clinical rotations in different hospital departments of Dubai Health Authority approved facilities. Each student's experience will include total four weeks each on Internal medicine, Infectious diseases, Pediatric care, Intensive Care, Surgery, Obstetrics & Gynecology, and two week blocks in each area for any two of the following Selection: Psychiatry, Drug Information Service, Therapeutic Drug Monitoring, and Total Parenteral Nutrition

## CLINICAL CLERKSHIP ROTATION MODULES Semester Three and Four

Clerkship (Choo	se any <u>three</u> areas in each semester)	Duration	Credit		
		(Weeks)	Hours		
CPC-IM-C	Internal Medicine	4	2		
CPC-ID-C	Infectious Diseases	4	2		
CPC-PD-C	Pediatrics	4	2		
CPC-IC-C	Intensive Care Medicine	4	2		
CPC-SG-C	Surgery	4	2		
CPC-OG-C	Obstetrics & Gynecology	4	2		
<b>Credit Hours</b>			12		
<b>Electives Clerksh</b>	iips (Choose any <u>one area in each semester)</u>	Duration	Credit		
		(Weeks)	Hours		
CPC-PSY-E	Psychiatry	2	1		
CPC-TDM-E	Therapeutic Drug Monitoring	2	1		
CPC-DIS-E	Drug Information Service	2	1		
CPC-TPN-E	Total Parenteral Nutrition	2	1		
CPC-AC-E	Ambulatory Care/Community Pharmacy	2	1		
<b>Credit Hours</b>	Any TWO	<u>.</u>	2		
CP-RP	Research Project & Dissertation	Min 24	6		
Credit Hours (Total)					

#### **Role of the Affiliated Hospitals**

A formal affiliation agreement between DPCG and training sites exists for the purpose of establishing a clinical training program for the MPharm (Clinical Pharmacy & Pharmacy Practice) second year students. Clinical centers and hospitals accept qualified students into organized, patient-based teaching programs and provide additional instruction with pertinent lectures, conferences, ward rounds and seminars. The college budgets a specified sum of money to help defray the expenses incurred in running the teaching program at each hospital; provides professional liability insurance coverage for all its students working in any of its affiliated hospitals; ensures that all students fulfill health care requirements required by hospitals; and only assigns students to hospitals with academic qualifications consonant with the demands of the clinical program provided by the hospital. All hospitals have been carefully selected to ensure their facilities meet DPC's standards. They must demonstrate a continuing commitment to medical education and furnish the necessary infrastructure to provide a successful clinical training program: integrating medical students into the health care team, providing access to the library and other ancillary facilities and supervising involvement with patients.

#### **Training sites**

- Rasheed Hospital, Dubai (MOU)
- Latifa Hospital, Dubai (MOU)
- Cleveland Clinic Abu Dhabi (MOU)
- Iranian Hospital (MOU)
- Universal Hospital, Abudhabi (MOU)
- Universal Hospital, Al Ain (MOU)
- The following MOH hospitals are also included as training sites with a formal approval from Ministry of Health & Prevention.
- Al Qassimi Hospital, Sharjah
- Fujairah Hospital, Fujairah
- Al Baraha Hospital, Dubai
- Applicants from military staff are allowed to pursue their clinical clerkship in Zayed Military Hospital.

#### **Supervision of the Clerkships**

DPC has a formal administrative and academic structure for conducting its clinical program at affiliated hospitals. DPC appoints a clerkship supervisor (from Clinical faculty of DPC) oversees the scheduling of rotations, delineates holidays and vacation time, administers examinations provided by DPC, and determines the scope of student activities, deals with student concerns. The clinical supervisor reviews the overall clerkship program with a program director at the time of their visits to the hospital.

#### **Role of Preceptors in Clinical Clerkship**

The teaching cornerstone of the core rotation is the close relationship between the student and the attending preceptors. Preceptors are nominated by the hospitals based on their experience and leadership qualities. Generally the senior pharmacist with a minimum of 5 years of experience is acceptable to be a preceptor as a requirement by the college. The student preceptor ratio will be maintained as 1:3. Many hours per week are spent in small group discussions involving students and

their clinical preceptors as they make ward rounds. Together, they discuss the patient's diagnosis, treatment and progress.

- 1. Orient student to site, policies, and procedures
- 2. Facilitate informal, collaborative, respectful learning environment
- 3. Be a positive and effective role model
- 4. Provide learning experiences with appropriate patients
- 5. Provide on-going feedback
- 6. Pace learning experiences to meet student needs
- 7. Direct student to resources, readings
- 8. Notify faculty of concerns about student's behavior, work, or progression
- 9. Provide evaluation data to clerkship supervisor.

#### **Description of Activities:**

Each Student has to select minimum three compulsory and one elective clerkship in each semester (Semester 3 & 4). The students should attend the clerkships in rotation. Each student has to attend 4 weeks of compulsory and 2 weeks of elective clerkship in rotation.

The student has to report to the preceptor (pharmacist) of their respective area of clerkship. The students are expected to become an active member of the team. The students will be monitored by the Clinical teaching staff assigned by the DPC. During the four-week rotations students are required to actively participate in patient care as outlined below:

- 1. Attend rounds with assigned medical team.
- 2. Monitor patients assigned by preceptor. In this regard you will be required to maintain a patient specific document to record patient database information, drug therapy problems, vital monitoring parameters, recommendations, and follow-up.
- 3. Meet with preceptor daily for discussion session that may include:
  - a. Giving informal oral presentation of assigned patients to preceptor and fellow students.
  - b. Provide daily update to preceptor and fellow students on patients they are following.
  - c. Discusses/complete reading material assigned previously by preceptor
- 4. Conduct at least 2 patient interviews during the rotation
- 5. Students have to report minimum 5 cases and 3 cases in each compulsory and elective clerkship rotation respectively.
- 6. Supply drug information question assigned by preceptor. (Don't offer any information to medical team that requires interpretation or judgment without first reviewing your response with your preceptor).

**Grading Policy:** Clerkship is evaluated based on clerkship evaluation (continuous) and final evaluation (case presentation and written report) with 60% and 40% marks respectively (see the evaluation forms). Students must obtain at least 70% marks in each clerkship. Students who fail to secure at least 70% marks in clerkships, have to repeat the respective clerkship during next six months. If the student again fail to secure at least 70% marks in clerkship, she will be withdrawn from the college.

#### **Rules of Training:**

**Attendance:** Attendance of this course is compulsory. Students must compensate all missed work during absence.

**Professional Demeanor:** Professional conduct must be maintained appropriately.

- Students should wear a clean white lab coat with a badge at all time to prove that the student follows Dubai Pharmacy College.
- Pants and open skirts are not allowed.
- Comfortable shoes are preferred.

#### Confidentiality and Working with Patient's Records

- The patient's medical record is a personal file which is to be properly respected and kept confident at all times. Under no circumstances should information about a patient be discussed outside the hospital with anyone than fellow health professionals.
- Charts are to be reviewed in their assigned area (patient care unit or medical record department) and are not to be removed from the location.
- When utilizing charts please return chart back to their proper storage area (chart rack on wards and appropriate personnel in medical record).
- The patient charts are very often utilized by health care providers and must be given to them when needed, e.g. when the patient is going for x-ray the chart must accompany him. Please do not write in any section of the chart, but if you have any concerns communicate to your preceptor.

#### Courtesy

- Participation in the rounds and clinics is conducted for the purpose of reviewing\_patient's care
  and teaching students. Good behavior is required during rounds and clinic. Questions
  concerning patient cases should be postponed until after the case presentation of the patient.
- Common rules of courtesy should be observed in dealing with Students should deal with all employees (nurses, receptionists, housekeepers, and other personnel) of the hospitals and clinics with respect.
- Reviewing patient charts should not interfere with the normal care and medical work-up scheduled for the patient.

#### Immunization and Health Insurance

- Immunization for the students is preferred as per the requirement of the hospital for health care professionals in UAE. All the students has health insurance and is renewed every year as the active health insurance and health check up is mandatory for visa renewal.
- Policies and procedures concerning blood borne pathogen exposures and exposures to communicable diseases are addressed during the orientation sessions for students. In addition, these policies are reinforced during the Surgery and Internal Medicine clerkships.
- In the event that the student contracts a communicable disease which potentially poses a risk to patients or co-workers (e.g. tuberculosis, varicella), steps will be taken to prevent dissemination in accordance with Student Health, Public Health and/or CDC protocols. Certain

communicable diseases may also be reported to county or state health authorities, as required by law.

#### **Student Safety & Precautions**

When providing patient care, regardless of the real or perceived communicable disease status of the patient, all students and staff should follow Standard Universal Precautions:

- Wash hands before and after ward rounds/patient contact, according to hospital policy, even if gloves are used.
- Wear gowns and gloves when exposure to blood, body fluids, excretions or secretions is likely.
- Use gloves appropriately according to aseptic and/or sterile techniques
- Never recap needles or scapel blades by hand.

#### **COURSE DESCRIPTION**

Course Code:	CPC-IM-C
Course Title:	Pharmacotherapy in Internal Medicine
Duration	4 weeks (2CH)
Working Hours	5 hrs/day
Prerequisite:	Pharmacotherapy I

#### **Course Description:**

The purpose of this rotation is to provide training to the students in clerking cases in the Department of Internal Medicine. Vital to this is the mandatory participation in the ward rounds with the internists on a daily basis for duration of time assigned to this department. The focus must be on each case markers namely, patient details, lab data, medication regimen and the associated rationale of therapy. The students must anticipate that each and every case will present with some issues to be dealt with in terms of the medication regimen.

A total of stated cases must be clerked and the same must be disseminated to the class in the form of presentations / group discussions on a weekly basis. The students must select particular case for the final exam presentation.

#### **Subject Objectives**

The objectives of this clerkship for the students are to:

- Participate and involve in the ward rounds with the internists (physician specializing in internal medicine).
- Carefully and efficiently clerk the cases assigned to them.
- Follow closely all aspects of each patient's care, and should be up-to-date on the patient's clinical status, lab data, medications, etc
- Actively participate in discussions with the internists about each specific case on-site.

Course Code:	CP-ID-C
Course Title:	Pharmacotherapy in Infectious Disease
Duration	4 weeks (2CH)
Prerequisite:	Pharmacotherapeutics II

#### **Course Description**

This clerkship will provide a broad overview or introduction to the treatment and management of infectious diseases. The focus will be on common infections seen in community and hospital settings, principles of microbiology and infectious diseases, antimicrobial use, and antimicrobial stewardship. The broad unit objectives are for students to develop and apply infectious diseases and antimicrobial use knowledge and skills in the care of patients, especially those with infections. These may be patients in the community or hospital settings. The knowledge and skills developed will be at a general level rather than at the level required for a specialist infectious diseases pharmacist.

#### **Subject Objectives**

The objectives of this clerkship for the students are to:

- introduce to a range of topics relevant to the optimal use of anti-infectives and the management of patients with infections.
- manage patients requiring anti-infective therapies, and the use anti-infectives in-general.
- develop critical thinking, communication and problem-solving skills, with a focus on infectious diseases and their treatment related topics.

Course Code:	CP-PD-C
Course Title:	Pharmacotherapy in Paediatric Care
Duration	4 weeks (2CH)
Prerequisite:	Pharmacotherapeutics II

#### **Course Description**

The purpose of this rotation is to provide training in pediatric medicine and infant-care. Students will participate in the direct primary care of the infant and children in the hospital while supervised and supported by an interdisciplinary faculty consisting of physicians, nurses, and pharmacists.

#### **Subject Objectives**

The objectives of this clerkship for the students are to:

- •Define different age groups within the pediatric population.
- •Explain general pharmacokinetic & pharmacodynamic differences in pediatric versus adult patients.
- •Identify factors that affect selection of safe and effective drug therapy in pediatric patients.
- •Identify strategies for appropriate medication administration to infant and young children.

Course Code:	CP-IC-C
Course Title:	Pharmacotherapy in Intensive care
Duration	4 weeks (2CH)
Prerequisite:	Pharmacotherapeutics I & II

#### **Course Description**

Students will be exposed to critically ill unstable patients for whom the common pathway of resuscitation will apply. Procedural skills will vary depending on which unit students rotate through, but basic procedural skills that will be obtained in any units they are placed to. Other commonly pharmacotherapy intervention will vary

depending on unit specialty.

#### **Subject Objectives**

The objectives of this clerkship for the students are to:

- •Understand the fundamental principles of overall management of cases in the intensive care unit:
- •Recognize conditions when a patient has a life threatening illness and needs intensive monitoring and care in an ICU setting
- •Learn Basic tenets of pharmacotherapeutic aspects of stabilization of an unstable patient
- •Understanding of a thorough differential diagnosis for patients with life threatening conditions

Course Code:	CP-S-C
Course Title:	Pharmacotherapy in Surgery
D 42	4 dec (2CII)
Duration	4 weeks (2CH)

#### **Course Description**

The objectives of this clerkship for the students are to provide exposure to an intense clinical experience that introduces students to the basic principles of surgery. The clerkship is designed to equip students with the knowledge and skills relevant to surgical management that all students should possess. In addition, it aims to emphasize teamwork, patient responsibility, and professional behavior as essential qualities to develop. Pharmacotherapeutic aspects of surgery are also given due emphasis in the clerkship.

Course Code:	CP-OG-C
Course Title:	Pharmacotherapy in Obstetrics & Gynaecology
Duration	4 weeks (2CH)
Prerequisite:	Pharmacotherapeutics I & II

#### **Course Description**

As part of clerkship experience, students will have the opportunity to be involved with inpatient, outpatient and on-call duties of obstetrics and gynecology practices.

Formal and informal daily teaching sessions and rounds with the faculty and resident staff are an integral part of the training. The Problem Based Learning System is used in the training held at the assigned hospitals. Those sessions are constructed so as to cover the Obstetrics and Gynecology Care objectives under the guidance of preceptors.

#### **Subject Objectives**

The objectives of this clerkship for the students are to learn the course of normal and abnormal labor, normal and complicated deliveries, care of newborn infants in the delivery room, and the clinical management of patients with gynecologic disorders.

Although a portion of learning will be derived from observation, the bulk will result from direct experience in outpatient clinics, the operating room and "on the deck" of labor and delivery. There is also a significant didactic learning component that includes a series of lectures, conferences and teaching rounds.

Course Code:	CPC-PSY-E	
Course Title:	Pharmacotherapy in Psychiatry	
Duration	2 weeks (1 CH)	
Working Hours	5 hrs/day	
Prerequisite:	Pharmacotherapy III	

#### **Course Synopsis**

This clinical experience will provide students with a solid foundation in the fundamentals of the evaluation, diagnosis, treatment, and appropriate referral of patients with mental health disorders. Students will be exposed to all major psychiatric diagnostic categories including: affective disorders, anxiety disorders, psychotic disorders, alcohol and substance abuse disorders, geriatrics disorders, children and adolescent disorders, somatization disorders, oppositional defiant disorder, autism, pervasive developmental disorder, and personality disorders.

Course Code:	CPC-TDM-E
Course Title:	Pharmacotherapy in Therapeutic Drug Monitoring
Duration	2 weeks (1CH)
Working Hours	5 hrs/day
Prerequisite:	Clinical Phamacokinetics

#### **Course Synopsis**

The purpose of this rotation is to provide training to the students in Therapeutic Drug Monitoring. Therapeutic drug monitoring is an essential component of the pharmacist's responsibility, and a critical part of the drug use process. Accurate monitoring insures appropriate and cost effective pharmaceutical care for all patients. Focus is placed on familiarizing with the various factors affecting TDM and the subsequent calculations of the medications to be administered. Therapeutic drug monitoring involves the maintenance, modification, or discontinuation of a drug based on its efficacy, therapeutic activity, adverse effect profile, and patient response.

Course Code:	CPC-DIS-E
Course Title:	Pharmacotherapy in Drug Information Service
Duration	2 weeks (1CH)
Working Hours	5 hrs/day
Prerequisite:	Clinical Pharmacy Practice

#### **Course Synopsis**

As part of this clerkship experience, students will have the opportunity to be involved in receiving calls from the physicians or patients or any other health care professionals and provide response to their queries. The aim of the DPIC internship is to deliver the students with experience in providing authenticated and updated drug and poison information services to the physicians or patients.

Course Code:	CPC-TPN-E	
Course Title:	Pharmacotherapy in Total Parenteral Nutrition	
Duration	2 weeks (2CH)	
Working Hours	5 hrs/day	
Prerequisite:	Clinical Pharmacy Practice	

#### **Course Synopsis**

The purpose of this rotation is to provide training in Total Parenteral Nutrition, administration and calculation. Students will participate and focus on the cases (patients) whose conditions require the administration of TPN. Further to this, they will be required to look at various issues in this context like the TPN-specific calculations, incompatibility issues and the like.

Course Code:	CPC-AC-E	
Course Title:	Ambulatory care/ Community Pharmacy	
Duration	4 weeks (2CH)	
Working Hours	5 hrs/day	
Prerequisite:	Clinical Pharmacy Practice	

#### **Course Synopsis**

The Ambulatory Care Clerkship introduces the student to outpatient medicine. The goal is for students to become familiar with practicing medicine in the outpatient setting. Students will integrate their knowledge of therapeutics and pathophysiology to effectively provide pharmaceutical care in an ambulatory patient care environment while a licensed preceptor supervises them.

#### **GRADING SYSTEM**

Grading at the graduate level is intended to offer feedback to students on their performance in a given course, including once students reach the dissertation and dissertation stage. Faculties are encouraged to specify course requirements and grading expectations for students.

Students are assigned grades (letters) for each course which 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:

Range of Marks	Grade Point	Evaluation	Grade Symbol
95 - 100	4	Outstanding	A+
90 – 94.99	3.75	Excellent	A
85 – 89.99	3.50	Very Good	B+
80 – 84.99	3.00	Good	В
75 – 79.99	2.50	Satisfactory	C+
70 – 74.99	2.00	Pass	С
65 – 69.99	1.5	Unsatisfactory	D+
Below 65	Failed	Failed	F
Administrative Codes			
-	Incomplete		ı
-	Withdraw		W

#### Computation of the Cumulative Grade Point Average (CGPA) and Grade Point Average (GPA)

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 in a semester. The CGPA is calculated by multiplying the grade of each course by the number of its credit hours and dividing the total of all courses by the number of total credit hours taken for all semesters. Both GPA and CGPA are rounded to the nearest decimal units. GPA and CGPA are calculated according to the following formula:

GPA = Total (credit hours per course x grades received per course) for all courses taken in one semester

Total credit hours for all courses taken in one semester

CGPA = Total (credit hours per course x grades received per course) for all the courses taken in all semesters

Total credit hours for all the courses taken in all semesters

GPA / CGPA	Evaluation
3.75 - 4.00	Outstanding
3.74 - 3.60	Excellent
3.00 - 3.59	Good
2.50 - 2.99	Satisfactory
2.00 - 2.49	Unsatisfactory

#### **GRADUATION PROJECT FOR M.PHARM (Clinical Pharmacy):**

After successful completion of didactic courses in year one in Dubai Pharmacy College (DPC), Students are required to go for clinical clerkship rotation in Hospitals in Year two. During their training, students are required to conduct a minor research project for a minimum of 12 weeks in clinical, hospital or community related topics. All the senior academic staff of Clinical Pharmacy and Pharmacy Practice unit will be involved in supervising the M. Pharm Clinical pharmacy postgraduate students in their research as part of the curriculum. Students are required to prepare a proposal for their research/review topic. If the project involves interaction with the patients or patient data then they are required to apply for institutional ethical approval in DPC. They are also required to get an approval from DHA/MoH, if the data collection site is in DHA/MOH hospitals. Students utilize hospital databases, library databases to conduct the research/reviews. Students have to submit the report at the end of Clerkship training and have to do final presentation of the research/systemic reviews to fulfill the requirement of Master of Pharmacy (clinical pharmacy) programme.

Upon successful completion of the research project during the second year of the programme, candidates will be able to demonstrate:

- 1. An aptitude for research and will be equipped to undertake (under supervision) focused research in a field of their choosing;
- 2. Several generic competencies that are required of postgraduates including being able to:
  - formulate meaningful and relevant research questions;
  - formulate a testable research hypothesis;
  - design a study to test this hypothesis;
  - prepare drafts of research protocols that will be peer reviewed;

- carry out research under supervision adhering to guidelines laid down by professional societies;
- write results of their research in their own words, providing appropriate references to sources of ideas and information
- communicate results of their research to a professional audience; and
- 3. An aptitude for continuous professional development.

The evaluation process of the will be as follow:

- Research & Report (60%),
- Presentation & viva voce (40%)

#### **Report & Presentation:**

- The candidate is expected to present his/her research project/systemic review report under the following headings to the supervisor and an internal examiner/representative appointed by the Dean, Dubai Pharmacy College:
- Background (motivation for this work); hypothesis (if appropriate); objectives; methods; summary of results; limitations of the present study; conclusions and references.
- The examiner should be provided with a pre specified semi-structured assessment scheme for
  evaluating the students' performance. The viva-voce should be moderated by the internal
  examiner. Successful defence of report is required for the candidate to be declared as passed.