

# BPharm catalog



كلية دبي للصيدلة للبنات  
Dubai Pharmacy College for Girls



*"Dubai Pharmacy College for Girls is officially licensed and accredited by the Ministry of Education – Higher Education Affairs of the United Arab of Emirates to award the Bachelor of Pharmacy degree in higher education."*

Batch 30  
AY 2021-22

DUBAI QUALITY  
APPRECIATION  
PROGRAM

*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



## DPCG Academic Calendar- Academic Year 2021-2022 (1443)

### Fall Semester

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	05/09/2021	28-01-1443
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 Semester

### Spring Semester

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 Semester

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	Friday	8/07/2022	9-12-1443



Events	
Event	Date
Prophets Birthday*	Friday 8 <sup>th</sup> October 2021
Martyr's Day	Wednesday, 1 <sup>st</sup> December 2021
UAE National Day	Thursday and Friday 2 <sup>nd</sup> - 3 <sup>rd</sup> December, 2021
New Year's Day	Saturday, 1 <sup>st</sup> January, 2022 <b>–during winter break</b>
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
* <b>Note:</b> Islamic holidays are determined after sighting of the moon. Thus actual dates may not coincide with the dates in the calendar	
<b>**Beginning of Academic Year 2022-2023 will be on Sunday 21<sup>th</sup> August, 2022</b>	

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### Message from the Founder

**Haji Saeed Bin Ahmed Al Lootah**

(1923-2020)

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 for Girls was established in 1992. The first pharmacy College, accredited by the Ministry of Higher Education and Scientific Research, UAE, is the result of the 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 for Girls continues to demonstrate unique values that extend well beyond its functional benefits creating more excellent economic, social and environmental benefits for people in the United Arab Emirates and beyond.



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

## Foreword from the Dean

This is a challenging time to enter the pharmacy profession. With each passing year, the number of prescriptions increases, and so does the role of a pharmacist. Welcome to Dubai Pharmacy College for Girls that offers an absolutely first-rate BPharm program, and so much more, all built on a tradition of excellence. That tradition is very long, indeed. Established in 1992 by Haji Saeed Ahmed Al Lootah, DPCG offered the first BPharm degree program in the Gulf region. In recognition, our College is accredited and licensed by the Ministry of Education - Higher Education Affairs UAE since 1998. So, the degree program has worldwide recognition. It is also endowed with the Dubai Quality Appreciation Award in 2004.

The modern facilities provided in the classrooms and, teaching and research labs would be a solid atmosphere for students who wish to study in pursuing a career as pharmacists who hold their own firm opinions based on scientific knowledge and researchers leading the field of Pharmaceutical Science and Clinical Science.

Dubai Pharmacy College for Girls proud of its tradition of close faculty-student relations. We welcome all of you who have a strong will to fulfil your dreams as competent and successful healthcare providers. I assure DPCG students will be well prepared to help patients manage their medication regimens and improve their quality of life.

Around the globe, we have more than 1000 alumni. Most of them are well placed or working towards a higher degree in the US, UK, Canada, India, Syria, Egypt, Sudan - this stands testimony to all our accomplishments.





## 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.

1992	Dr. Mizra Beg, Director (DIER) was in charge. Dr Saeed Ahmad Khan was appointed as the Head of Educational Unit.
1992-'93:	The first batch of 27 students (16 girls and 11 boys) were enrolled.
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, Iranian Hospital 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 'Pharmataalk- 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, Pharmacoeconomics.
	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

<b>DPCG Partnerships</b>	
<b>PROFESSIONAL PRACTICE EXPERIENCE PARTNERS</b>	
<b>ORGANIZATIONS</b>	<b>Description</b>
<b>Dubai Health Authority (DHA)</b>	<ul style="list-style-type: none"> <li>Undergraduate students in their last semester undertake and under course Hospital training in different hospitals of DHA.</li> <li>Postgraduate students undertake their Clinical Clerkship in their final year of study</li> </ul>
<b>Iranian Hospital- Dubai</b>	<ul style="list-style-type: none"> <li>Undergraduate students in their last semester undertake and under course Hospital training</li> <li>Postgraduate students undertake their Clinical Clerkship in their final year of study</li> </ul>
<b>Cleveland Clinic Abu Dhabi (CCAD)</b>	<ul style="list-style-type: none"> <li>Postgraduate students undertake their Clinical Clerkship in their final year of study</li> </ul>
<b>Military Hospital- Abu Dhabi</b>	<ul style="list-style-type: none"> <li>Postgraduate students undertake their Clinical Clerkship in their final year of study (applicable only for UAE Military staff)</li> </ul>
<b>MOHAP hospitals</b>	<ul style="list-style-type: none"> <li>Postgraduate students undertake their Clinical Clerkship in their final year of study (applicable only for UAE nationals only in Al Qasimi Hospital, Al Baraha Hospital &amp; Fujairah Hospital)</li> </ul>
<b>Thumbay Hospital- (GMU)-Ajman</b>	<ul style="list-style-type: none"> <li>Undergraduate students in their last semester undertake and under course Hospital training</li> <li>Postgraduate students undertake their Clinical Clerkship in their final year of study in Thumbay Hospital – Ajman.</li> </ul>
<b>Emirates European Hospital</b>	<ul style="list-style-type: none"> <li>Undergraduate students in their last semester undertake and under course Hospital training</li> </ul>
<b>NMC Hospitals</b>	<ul style="list-style-type: none"> <li>Undergraduate students in their last semester undertake and under course Hospital training</li> </ul>
<b>Dr. Sulaiman Al Habib Hospital</b>	<ul style="list-style-type: none"> <li>Undergraduate students in their last semester undertake and under course Hospital training</li> </ul>
<b>Althiqa Pharmacy Group</b>	<ul style="list-style-type: none"> <li>Community Pharmacy training for undergraduate students</li> </ul>
<b>Aster Group</b>	<ul style="list-style-type: none"> <li>Community Pharmacy training for undergraduate students.</li> </ul>
<b>Monash University</b>	<ul style="list-style-type: none"> <li>Collaborate with Monash University to provide Simulation training</li> </ul>
<b>ACADEMIC PARTNERS</b>	
<b>University of Strathclyde</b>	Memorandum of understanding with University of Strathclyde providing students the opportunity to pursue postgraduate /doctoral studies.
<b>Universiti Sains Malaysia (USM)</b>	Opportunity for students to pursue postgraduate/doctoral studies.. Faculty member in the Department of Clonical Pharmacy and Pharmacotherapeutics is an approved supervisor by USM
<b>International Islamic University Malaysia (IIUM)</b>	Opportunity for students to pursue postgraduate/doctoral studies.. Faculty member in the Department of Clonical Pharmacy and Pharmacotherapeutics and Department of Pharmaceutics are approved supervisors by IIUM
<b>Manipal Academy of Higher Education –(MAHE- Dubai)</b>	DPC and MAHE have common interest in field of pharmaceutical and life sciences education and research thus have a collaboration in the fields of academics, education and research.
<b>Universitas 17 Agustus 1945 Jakarta</b>	DPC and Universitas 17 Agustus 1945 Jakarta have common interest in field of pharmaceutical and life sciences education and research thus have a collaboration in the fields of academics, education and research.



<b>SVKM'S Dr. Bhanuben Nanavati College of Pharmacy</b>	DPC and SVKM'S Dr. Bhanuben Nanavati College of Pharmacy have common interest in field of pharmaceutical and life sciences education and research thus have a collaboration in the fields of academics, education and research.
<b>Ulster University, N Ireland</b>	DPC and Ulster University, N Ireland have common interest in field of pharmaceutical and life sciences education and research thus have a collaboration in research, summer schools, exchange of staff and students and joint course delivery.
<b>Institute of Pharmaceutical Sciences, (IPS) University of Veterinary and Animal Sciences (Uvas), Lahore, Pakistan</b>	DPC and UVAS have common interest in field of pharmaceutical and life sciences education and research thus promoting academic and professional cooperation in training
<b>University of Colorado SKAGGS School of Pharmacy and Pharmaceutical Sciences</b>	DPC collaborates with University of Colorado SKAGGS School of Pharmacy and Pharmaceutical Sciences to provide students to clinical training
<b>Professional Regulatory Affairs (PRA) Consultancy</b>	DPC partners with PRA to offer certificate courses in Regulatory Affairs, Pharmacovigilance, etc.
<b>STUDENT EXPERIENCE</b>	
<b>International Pharmaceutical Student Federation (IPSF).</b>	Students with the opportunity to explore numerous outreach activities, professional meetings, and student organization events.



## 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 DPCGG one of the leading institutions for the pharmacy education in the world."*

## Mission

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

## Accreditation and Licensure

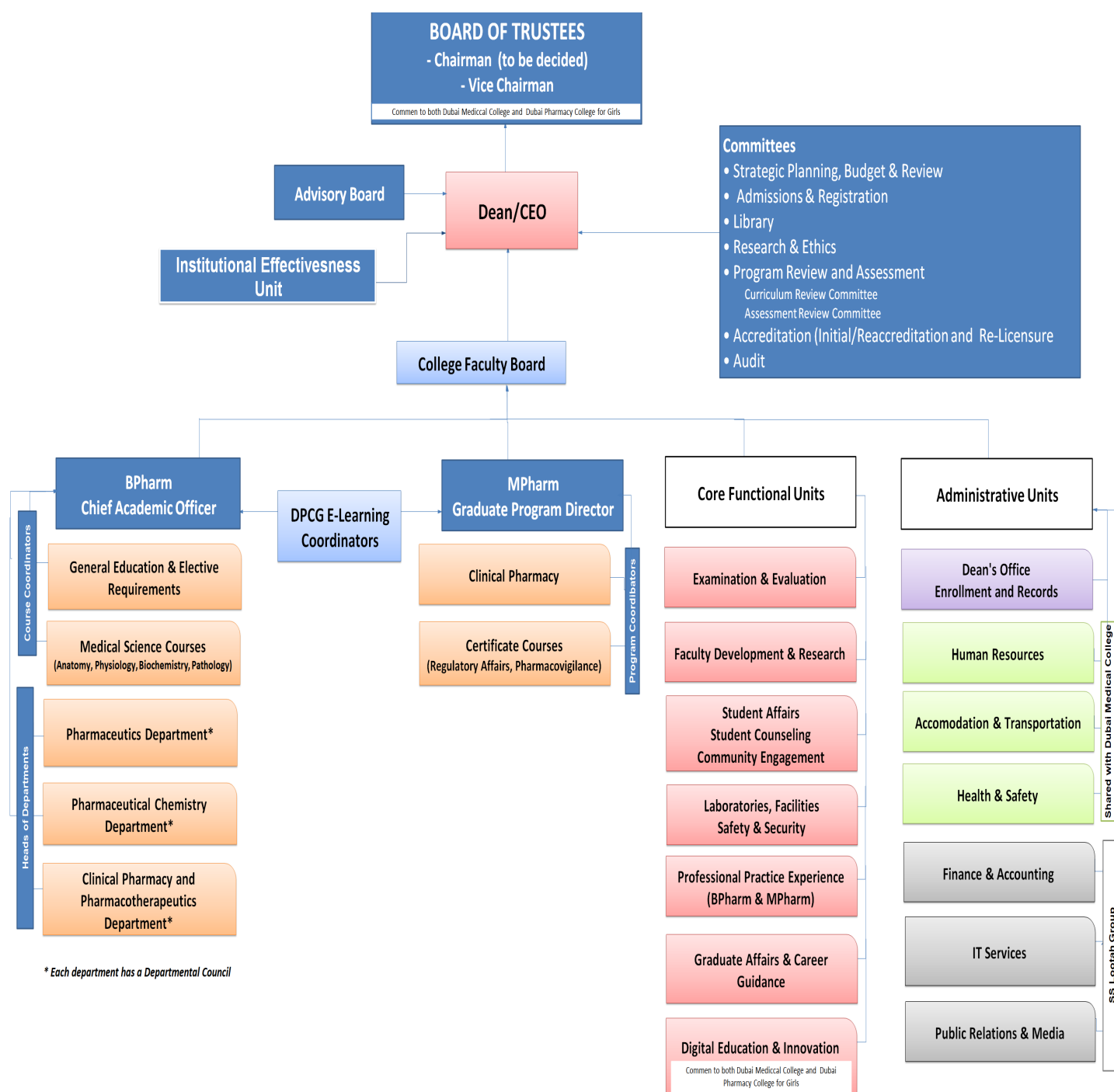
Dubai Pharmacy College for Girls offers the following programs:

- I. Bachelor of Pharmacy
- II. Master of Pharmacy - Clinical Pharmacy

The Commission accredits all the programs for Academic Accreditation (CAA), Ministry of Education – Higher Education Affairs, UAE.



## Organizational Structure



Reviewed and Updated: September 2021



## 1. Program

<b>INSTITUTION:</b>	<b>Dubai Pharmacy College for Girls, Dubai, UAE</b>
<b>DEGREE:</b>	<b>Bachelor of Pharmacy</b>
<b>LENGTH &amp; MODE:</b>	<b>Four and half academic years, Full time</b>
<b>ACADEMIC PERIOD:</b>	<b>First of September to End of July</b>
<b>MINIMUM REGISTRATION PERIOD:</b>	<b>4.5 years</b>
<b>MAXIMUM REGISTRATION PERIOD:</b>	<b>6 years</b>
<b>Chief Academic Officer:</b>	<b>Prof. Naglaa Gamil Shehab</b>

## 2. Admission Requirements

To enroll in the DPCG undergraduate degree program, you will need to meet the minimum academic and English language requirements as outlined below:

<b>Academic Requirements:</b>	<ol style="list-style-type: none"> <li>1. A minimum High School Average of 85% for Advanced Track or 80% for Elite Track or equivalent in Standardized International Systems is required with no admission of General Track applicants.</li> <li>2. English Language Proficiency Test approved by the CAA <ul style="list-style-type: none"> <li>- Internet Based Test (IBT) TOEFL 61 out of 120 (<i>TOEFL PbT is not accepted</i>)</li> <li>- International English Language Testing System (IELTS-Academic) 5.0</li> <li>- EmSAT 1100 – 1225</li> </ul> </li> <li>3. An EmSAT score of 800 for Arabic Language.</li> <li>4. An EmSAT score of 900 in Mathematics or equivalent, plus scores of 900 in two of the three science subjects (Chemistry, Biology or Physics). In the case that EmSAT scores in Mathematics and two science subjects are not available, a candidate shall sit an equivalent Admission Exam designed by DPCG which includes Chemistry, Biology, Physics and Mathematics.</li> <li>5. Passing a personal interview set by DPCG</li> </ol> <p><b><u>Additional Requirements:</u></b></p> <p>Students of GCSE/IGCSE curriculum must have completed five subjects (Biology or Human Biology, Chemistry, English Language, Mathematics or additional Mathematics or Statistics, and Physics) at the ordinary level with at least 2 B's and 3 C's grades, plus two subjects (Biology and Chemistry) at the GCE Advanced Subsidiary or Advanced level with at least C grade.</p> <p>Students of International Baccalaureate Diploma must have completed six subjects with three at the standard level and three at the higher level with minimum 30 diploma points (equivalent grade of 85%) fulfilling following mandatory courses requirement:</p> <ul style="list-style-type: none"> <li>• Standard or Higher level Math</li> <li>• Standard or Higher level Biology</li> <li>• Standard or Higher level Chemistry</li> </ul>
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### The Interview Process.

Based on the CAA Standards 2019: Applications are initially screened by the Head of Enrolments and Records for completeness of requested information, adequacy of the applicant's course work, and grades. Other committee members then review each screened application with regard to the applicant's personal

characteristics and qualifications. Based on this initial screen, the most qualified applicants are then invited for an on-campus interview with one member of the Admissions Committee and a faculty or staff member. Towards the end of the interview, the applicant is given the opportunity to ask questions about various aspects of the program. All off-campus applicants have the opportunity to meet individually with a staff member to address any questions regarding professional program prerequisite completion or other issues of concern. All interviews are conducted once the application documents are screened and verified by the Head of Enrolment and Records. Students are notified if they will be admitted, wait-listed, or denied admission. In making admissions decisions, the Committee evaluates student attributes and a set of admissions criteria that are established by the Admissions Committee and is reviewed annually. Candidates should submit a certificate in proof of having good character and provide evidence for their emotional, social and academic maturity from the Head of the Institution last attended.

### DPCG Conditional Admission

Conditional admission will be allowed for not achieving the Arabic Language EmSAT score but not for English Language, Mathematics and Science subjects (or equivalent admission test in these subjects) or overall High School Certificate, as above.

### TRANSFER ADMISSION POLICIES

The College also welcomes applications from candidates studying with other educational institutions in BPharm. Course who wishes to transfer to DPCG. It may be possible to grant exemption from the earlier part of the degree course in recognition of a candidate's success in her previous course of study.

The following are the necessary conditions for transfer to the DPCG from other Pharmacy Colleges:

1. Dubai Pharmacy College for Girls (DPCG) accepts the transfer of students from an accredited College with a curriculum that is comparable to that offered at DPCG.
2. Students must meet the English language proficiency requirements such as minimum TOEFL score of (61 IBT) or 5.0 in IELTS.
3. The student must provide a letter of application to the Dean of the College specifying reason (s) for requesting a transfer and desired date of transfer.
4. Dubai Pharmacy College for Girls requires applicants to submit their transcripts for evaluation of transferable subjects /teaching hours from previous College experiences.
5. No student who has been dismissed from any Pharmacy College will be eligible for transfer to DPCG.
6. All applicants must provide conduct certificates from the Pharmacy College, where they are currently enrolled.
7. All applicants should contact the **Dean's Office** to inquire about having their transcripts reviewed.
8. **The student transferring from another accredited College must be in good academic standing (a minimum CGPA of 2.0, on a 4.0 scale or equivalent).**
9. **A student applying for transfer to DPCG, must study more than 60% of the syllabus of B. Pharm at DPCG.**
10. The final decision for approval of transfer will be made by the Dean after review of the transfer request by the Chief Academic Officer of the College.
11. Transfer of students is not allowed after the second year.
12. Before considering any transfer application, the existence of an appropriate seat for the student should be considered.
13. Before attending Dubai Pharmacy College for Girls, attested records from the previous College and higher secondary school should be submitted to the Dean's secretary.

**ADMISSION RULES FOR DIPLOMA IN PHARMACY & SCIENCE GRADUATES** Diploma in Pharmacy holders will be admitted in the second year of B.Pharm if they meet the following requirements:

- 1) She should have passed Diploma in Pharmacy **with good academic standing (a minimum CGPA of 2.0, C grade, on a 4.0 scale or equivalent).**
- 2) She should apply for admission to BPharm course in DPCG within five years after obtaining the Diploma in Pharmacy and also, she should be working in the field related to Pharmacy.
- 3) Candidates should submit a certificate in proof of having a good character and provide evidence for their emotional, social, and academic maturity from the Head of the Institution last attended.
- 4) Evidence of proficiency in the English language should also be provided.

Science graduates and graduates in Medicine, Health Sciences, Dentistry and Veterinary Sciences can also be admitted to B. Pharm. **course if they meet the following requirements:**

- 1) She should have passed Graduate Degree with **good academic standing (a minimum CGPA of 2.0, on a 4.0 scale or equivalent).**
- 2) She should apply for admission in B. Pharm. course in DPCG within five years after obtaining her Graduate Degree and, she should be working in the field related to her specialization.
- 3) Candidates should submit a certificate in proof of having a good character and provide evidence for their emotional, social, and academic maturity from the Head of the Institution last attended.
- 4) Evidence of proficiency in English language should also be provided.

**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.

**Registration Procedure:**

Registration must be completed by the end of July of each year. Authority to extend this deadline is vested on the Dean.

The applicant should fill the online application form and attach the required documents with 300/- AED and then submit it to Dean's office.





### DOCUMENTS required for admission:

The following documents will be required to be submitted along with the application form. The original certificates should be brought in person by the applicant at the time of interview.

1. Provisional certificate of the examination passed (Higher Secondary) based on which admission is sought.
2. Mark-sheet of the examination passed.\*
3. Leaving certificate from the school last attended.
4. Six passport size color photographs.
5. Birth certificate.
6. Character certificate from the Head of the Institution last attended.
7. Copy of the passport and resident visa (for expatriate students only).
8. Medical certificate.
9. A document certifying TOEFL/IELTS requirements.

**\*Note: School certificates from outside UAE should be attested from a place of issue:**

**a) Country of Study**

- Ministry of Education
- Ministry of Foreign Affairs
- The Embassy

**b) UAE**

- Equivalency certificate from Ministry of Education

### 3. Student Intake and Fee Structure

STUDENT INTAKE: Student intake will be limited to 70 students not exceeding 80 students in total.		
Fees	Total Amount/Year	Mode of Payment
<b>Tuition*</b>	Dhs45,000 (+5% VAT applicable) Dhs1100/credit hour	Dhs22,500/- at time of admission Four installments
<b>Hostel</b>	Dhs12000/- to 18000/-	Four installments with tuition fees.
<b>Transportation (+5% VAT applicable)</b>		
Dubai(daily)	Muhaisnah/Mezher/Mirdiff/Rashidiya/Twar/Qusais/ Nahda Dhs3000/- Deira/Bur Dubai/Satwa/Karama/Umm Suqaim/Jumeirah/Barsha Dhs4000/-	Four installments with tuition fees.
Sharjah/Ajman(daily)	Dhs 5000/-	
AbuDhabi, Fujairah, Al Ain, Baniyaas (weekly)	Dhs 5000/-	Four installments with tuition fees.

**\*NOTE:**

The tuition fees once communicated will remain the same throughout the course for the four year of study.  
Transport and Hostel fees are subject to change.

### Financial aid

Dubai Pharmacy College for Girls as part of the Board of Trustees keen desire to attract outstanding girls' students is hereby decided as follows:



- Students with the highest School grades will be sorted out during admission period to choose the outstanding students from different school curriculum (Arabic, British, Indian, Pakistani, American) to achieve the first-year scholarship with a maximum 50% from first year fees for each category mentioned below:
  1. Students from the MOE curriculum will be granted 3 scholarships as following:
    - 1<sup>st</sup> student: will be granted a discount of 25% from the tuition fees.
    - 2<sup>nd</sup> student: a discount of 15% from the tuition fees.
    - 3<sup>rd</sup> student: a discount of 10% from the tuition fees.
  2. Students from the British curriculum will be granted 3 scholarships as following:
    - 1st student: will be granted a discount of 25% from the tuition fees.
    - 2nd student: a discount of 15% from the tuition fees.
    - 3rd student: a discount of 10% from the tuition fees.
  3. Students from the American curriculum will be granted 3 scholarships as following:
    - 1st student: will be granted a discount of 25% from the tuition fees.
    - 2nd student: a discount of 15% from the tuition fees.
    - 3rd student: a discount of 10% from the tuition fees.
  4. Students from the Indian or any other curriculum will be granted 3 scholarships as following:
    - 1st student: will be granted a discount of 25% from the tuition fees.
    - 2nd student: a discount of 15% from the tuition fees.
    - 3rd student: a discount of 10% from the tuition fees.
- According to the rank achieved by the students in the previous year, scholarships will be granted to the first place 75%, second 50%, third, fourth and fifth 25%, this will be yearly updated according to the rank of the students. *(This scholarship remains with the students all four years if they maintain their merit in each academic year results. If they do not maintain good academic standing, then other students with good grades are awarded the scholarship).*
- Financial aid could be granted for the second and third sisters, 10% and 15% respectively in case the two or the three sisters are registered in DPCG.

**Note: these scholarships and financial aids are discounted from the yearly fees excluding the hostel and bus fees.**

**Grant of the above-mentioned concession shall be subject to the following:**

1. Fulfillment of other conditions mentioned in the prevailing rules and regulations.
2. We are faithfully adhering to the Islamic educational codes and principles and other rules and regulations in force in the College.
3. The College shall not be bound to continue the concession so granted in case of the students transfer to another College, or any change in her educational progress.
4. Consistently obtaining not less than Excellent (grade) at all levels of studies.
5. Priority for an award of the concession shall be given to the candidate scoring the highest marks in the admission to the College.

**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 a student in the first or second week after commencement of the 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 :	
Bachelor of Pharmacy	AED 4500
Master of Pharmacy	AED 5000

### Add/Drop/Withdrawal from Courses

The credit transfer system is not applicable for regular students as DPCG strictly adheres to the time-table schedule, the students cannot add or drop any regular courses allotted for each semester.

### Withdrawal Policy

If a student in good standing requires a withdrawal, a written petition for withdrawal is made and approved by the Chief Academic Officer/ Graduate Program Director. Good standing designates any student not subject to probation or disqualification.

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

### Returning Student Readmission Policy:

If returning to the first semester: Readmission form must be submitted on or before the start of the term.

If returning to the second semester: Readmission form must be submitted on or before the first week of the second semester of the same year.

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 and if applicable, for a scholarship.

Students' Leave of Absence that exceeds one calendar year from date of request will have their status changed to "Withdrawal."

## 4. Prospective Careers

Various avenues open to pharmacists in different areas of activity are as follows:

### 1) Community Pharmacy (Retail Pharmacy)

- Dispensing of prescriptions after review
- Selection of non-prescription drugs
- Pharmaceutical care for certain diseases
- Purchasing, storing and dealing with pharmaceutical products



## **2) Hospital Pharmacy (Clinical Pharmacy – Pharmaceutical Care)**

- Dispensing of prescriptions after review
- Answering queries through the Drug Information Center
- Therapeutic Drug Monitoring
- Dealing with intravenous admixtures
- Pharmaceutical Care (prevents drug interactions and adverse drug reactions, proper use of drug products, ensure compliance, discover and solve adverse drug reactions)
- Production of certain radioactive drug products
- Administration, purchasing and participating in the selection of drugs

## **3) Pharmaceutical Industry**

- Synthesis and analysis of raw materials
- Extraction of active ingredients from medicinal herbs, and other natural products
- Production of pharmaceutical products
- Quality Control of pharmaceutical products
- Research and Development
- Marketing and promotion of drugs/Distribution of pharmaceutical products

## **4) Government Organizations (MOH & DHA)**

- Control and auditing of community hospital pharmacies
- Drug Registration and Control
- Defence and Interior Ministry pharmacies
- ADR monitoring

## **5) Research and Development Centres**

- Research on drugs in various research centers
- Research on medicinal herbs, natural products, biotechnology and genetic engineering
- Research on other areas of pharmaceutical sciences

## **6) Universities and Colleges**

- Work as Demonstrators/Teaching Assistants
- Seek higher education to obtain Diploma, Masters and Ph. D. degree

## **7) Other Careers**

- Medicinal Diagnostic Laboratories
- Pharmaceutical Consultation
- Marketing for Drug Products
- Nuclear Pharmacy and Forensic Pharmacy
- Insurance companies

## 5. BPharm Program Outcomes and Objectives

### 5.A. General Education Requirements


#### GER OBJECTIVES

General Education Requirements build on a foundation that prepares lifelong learners who will be engaged citizens in a complex and dynamic world in which they will live and work.

#### i. GER OUTCOMES

GER-PLO1	Quantitative reasoning	Apply mathematical and statistical reasoning to discipline specific problems and decision making.
GER-PLO2	Communication skills	Interchange ideas and information effectively through writing, speech, and visual and digital media
GER-PLO3	Ethical reasoning	Assess and weigh moral beliefs and practices, and their applications to ethical dilemmas
GER-PLO4	Technology and Information literacy	Locate, evaluate, cite, and effectively using information
GER-PLO5	Diverse perspectives and experiences	Acquire knowledge and analytical skills to understand a variety of perspectives and experiences.
GER-PLO6	Critical Inquiry	Systematic questioning and analysis of problems, issues, and claims
GER-PLO7	Wellness literacy	Acquire knowledge in science-based health fitness and aesthetic concepts.
GER-PLO8	Innovation	Explore how to generate creative ideas using mindsets and practices exhibited by successful innovators.

#### ii. Course Alignment to Program Learning Outcomes

 Program Learning Outcomes	Quantitative reasoning	Communication skills	Ethical reasoning	Technology and Information literacy	Diverse perspectives and experiences	Critical Inquiry	Wellness literacy	Innovation and Design Thinking
Course								
GE701 Mathematics and Statistics	✓							
GE702 Medical Terminology and Information Literacy	✓	✓	✓	✓		✓		
GE703 Computer Applications		✓		✓				
GE704 Islamic Studies			✓					
GE705 Positive Psychology		✓					✓	
GE706 Environmental Sustainability	✓					✓	✓	
GE707 Arabic Language Skills		✓						
GE708 UAE Society			✓		✓			
GE709 Innovation and Entrepreneurship				✓		✓		✓
PC701 Introduction & History of Pharmacy					✓			
<ul style="list-style-type: none"> <li>Courses generally align to 2-4 program learning outcome</li> </ul>								

### III. Alignment matrix

1. Minor contribution to PO	Topics are only introduced to produce "awareness"									
2. Moderate Contribution to PO	Topics are introduced and further developed or reinforced									
3. Major contribution to PO	Topics are fully introduced, developed or reinforced throughout the course									
GE Courses – BPharm Program Outcomes alignment matrix										
GE Courses offered	BPharm program outcomes									
	Knowledge				Skills			Competencies		
	A1	A2	A3	A4	S1	S2	S3	C1	C2	C3
Mathematics and Statistics							1			
Medical Terminology and Information Literacy						2		2	1	
Computer Applications						2	2			
Islamic Studies									2	2
Positive Psychology						1			2	
Environmental Sustainability									3	3
Arabic Language Skills						3				
UAE Society										3
Innovation and Entrepreneurship									3	3
Introduction and History of Pharmacy				2				2	2	
1 Minor contribution, 2 Moderate contribution, 3 Major contribution										

## 5. B. BPharm Program

### PROGRAM AIMS

- Produce pharmacists having knowledge, skills and competencies equivalent to local and International Standards of BPharm degree.
- Initiate research which will utilise locally available materials and data for possible use in pharmaceutical fields.
- Practice according to internationally accepted professional code of ethics.

### PROGRAM OBJECTIVES

*Program objectives of BPharm program is specifically aligned with the Level 7 of the Qualifications Framework for the UAE approved by The Board of the National Qualifications Authority (NQA) known as the QF Emirates.*

1. Offer a highly motivated educational environment to provide the students with profound knowledge of various fundamental, pharmaceutical, and clinical sciences.
2. Develop the ability of the students to utilize the acquired knowledge to contribute productively to various fields of pharmaceutical and clinical settings.
3. Produce graduates with professional skills needed to ensure effective communication with health care members, patients and community following professional code of ethics.
4. Develop a highly competent, responsible, life-long learner pharmacist with the vision of continuous professional development.

### PROGRAM OUTCOMES

QF Emirates Level 7	Program outcome:	Course Name	CAPE Educational Outcomes	Learning/ Teaching Methods and Strategies	Types/ Methods of assessment
Knowledge	On successful completion of this program, the students will be able to:				
	<p><b>A1.</b> Develop and Integrate the knowledge and understanding of the structural design of the drugs, their synthesis, quantitative and qualitative analysis, pharmacological activities, and toxicities to evaluate and explain drug action and solve therapeutic problems in the patient care process.</p> <p><b>A2.</b> Apply the knowledge of the basic concepts and techniques required to formulate different pharmaceutical and biotechnology-based products and implement quality control measures and tests to produce an effective and safe medicine.</p>	<p>-Pharmaceutical Organic Chemistry I -Pharmaceutical Organic Chemistry II -Medicinal Chemistry I -Medicinal Chemistry II -Medicinal Chemistry III -Pharmacology &amp; Therapeutics-I,II,III ,IV, V -Clinical Toxicology</p> <p>-Instrumental Analysis Natural Medicines, Safety and Efficacy, -Introduction and History of Pharmacy -Pharmaceutics-I -Pharmaceutics-II - Pharmaceutical Technology -Pharmaceutical Biotechnology</p>	<p>Learner</p> <p>-Learner - Innovator</p>	<p>Lectures, Tutorials, Practical, Self-Directed Learning, Seminars, Problem Based Learning,</p>	<p>Written Examinations, MCQ, Practical Reports,  Project Report, Quiz, Assignment</p>

	<p><b>A3.</b> Integrate the knowledge of biomedical sciences, pharmacokinetics, pharmacodynamics &amp; toxicological principles of the drugs to ensure the safety and efficacy of the medication to improve overall health and awareness.</p>	<ul style="list-style-type: none"> <li>- Natural Medicines, Safety and Efficacy</li> <li>-Alternative and Complementary medicine</li> <li>-Biochemistry</li> <li>-Microbiology &amp; Immunology</li> <li>- Clinical Biochemistry</li> <li>-Anatomy and Physiology I</li> <li>-Anatomy and Physiology II</li> <li>-Pathology</li> <li>- Medicinal Chemistry I, II and III</li> <li>-Pharmacology &amp; Therapeutics-I,II,III ,IV, V</li> <li>-Pharmaceutical Care</li> <li>-Clinical Toxicology</li> <li>-Biopharmaceutics and Pharmacokinetics</li> <li>-Applied Pharmacokinetics</li> <li>-Pharmacogenomics &amp; Precision Medicine</li> <li>-Research Methodology &amp; Biostatistics</li> <li>-Hospital Pharmacy</li> <li>-Capstone course</li> <li>-Professional Skills in Practice</li> </ul>	<ul style="list-style-type: none"> <li>-Life -long Learner</li> <li>-Promoter</li> </ul>	Brainstorming, Kahoot	
	<p><b>A4.</b> Demonstrate specialist and comprehensive knowledge required in providing specialized Clinical services needed in hospital and other clinical environments.</p>	<ul style="list-style-type: none"> <li>-Pharmaceutical Administration and Pharmacoeconomics</li> <li>-Pharmacy Automation &amp; Informatics</li> <li>-Pharmacy Practice</li> <li>-IPPE &amp;APPE</li> </ul>	<ul style="list-style-type: none"> <li>-Self -aware</li> </ul>		
<b>Skills</b>	<p><b>B1.</b> Design educational strategies for prevention and intervention in disease management for individuals and communities to improve health and wellness</p>	<ul style="list-style-type: none"> <li>-Alternative and Complementary medicine</li> <li>-Microbiology&amp; Immunology</li> <li>-Pharmacoepidemiology &amp;Pharmacovigilance,</li> <li>-IPPE &amp;APPE</li> <li>-Capstone course</li> <li>-Capstone Project</li> </ul>	<ul style="list-style-type: none"> <li>-Developer</li> <li>-Innovator</li> </ul>	Practical classes, Project Work, Workshops, Case studies, Computer Lab, Role play, Self-directed learning, Method demonstration, Field trip.	Oral, Scientific Poster, Symposium , OSCEs, practical, Case-based assessment, Project Report & Capstone Project, Article review, Self-learning assessment, Capstone course assessment.
	<p><b>B2.</b> Communicate effectively orally and in writing and deploy a range of presentation techniques and strategies to present, explain and assess information within workplace settings.</p>	<ul style="list-style-type: none"> <li>-Pharmaceutical Organic Chemistry II,</li> <li>- Medicinal Chemistry I, II and III,</li> <li>-Instrumental Analysis</li> <li>-Natural Medicines, Safety and Efficacy</li> <li>- Introduction and History of Pharmacy</li> <li>-Pharmaceutics-I</li> <li>-Pharmaceutics-II</li> <li>-Pharmaceutical Biotechnology</li> <li>-Pharmaceutical Technology</li> <li>-Biopharmaceutics and Pharmacokinetics</li> </ul>	<ul style="list-style-type: none"> <li>-Communicator</li> </ul>		



		<ul style="list-style-type: none"> <li>-Biochemistry</li> <li>-Clinical Biochemistry</li> <li>-Anatomy and Physiology I</li> <li>-Anatomy and Physiology II</li> <li>-Pathology</li> <li>-Pharmacy Practice</li> <li>-Pharmaceutical Care</li> <li>-Professional Skills in Practice</li> <li>-Research Methodology &amp; Biostatistics</li> <li>-Capstone course</li> <li>-IPPE &amp; APPE</li> <li>-Capstone Project</li> </ul>			
	<p><b>B3.</b> Identify problems, analyze, deploy and utilize pertinent information in clinical case discussion and evaluate the patient care process with an appropriate pharmaceutical care plan.</p>	<ul style="list-style-type: none"> <li>-Applied Pharmacokinetics</li> <li>-Pharmacy Practice</li> <li>-Pharmaceutical Care</li> <li>-Natural Medicines, Safety and Efficacy</li> <li>-IPPE &amp; APPE</li> <li>-Pharmacology and Therapeutics- I, II, III, IV &amp; V</li> <li>-Professional Skills in Practice</li> <li>-Hospital Pharmacy</li> <li>-Pharmacoepidemiology &amp; Pharmacovigilance</li> <li>-Calculations in Practice</li> <li>-Clinical Toxicology</li> <li>-Research Methodology and Biostatistics</li> <li>-Capstone course</li> <li>- Capstone Project</li> </ul>	<ul style="list-style-type: none"> <li>-Problem Solver and decision maker</li> <li>-Patient Advocate for safe and effective medication</li> <li>-Caregiver and provider &amp; medication expert</li> </ul>		
<b>Competence</b>	<p><b>C1. (Autonomy and Responsibility)</b> Demonstrate the leadership ability to be innovative by using creative thinking and take responsibilities to function both independently and as a healthcare team member.</p>	<ul style="list-style-type: none"> <li>-Pharmaceutics-I</li> <li>-Pharmaceutics-II</li> <li>-Pharmaceutical Biotechnology</li> <li>-Pharmaceutical Technology</li> <li>-Natural Medicines, Safety and Efficacy</li> <li>-Alternative and Complementary medicine</li> <li>-Pharmacy Practice</li> <li>-Pharmaceutical Care</li> <li>-Professional Skills in Practice</li> <li>-Hospital Pharmacy</li> <li>-Pharmaceutical Administration and Pharmacoeconomics</li> <li>-Pharmacy Automation &amp; Informatics</li> <li>-Pharmacoepidemiology &amp; Pharmacovigilance</li> <li>-Capstone course</li> </ul>	<ul style="list-style-type: none"> <li>-Leader</li> <li>- Healthcare provider)</li> <li>Interprofessional</li> <li>-collaborator</li> <li>-Innovator</li> </ul>	,Prescription evaluation, PBL, Workshops, Role play, Case studies, Presentation.	PPE evaluation and exam, OSCEs, Calculations in Practice exam, SDL, Presentation, Capstone course evaluation, Capstone Project evaluation, DUPHAT evaluation, Oral presentation, Presentation assessments

		-Professional Practice Experience Medicinal Chemistry II Pharmacology and therapeutics I, II, III,IV and V -Pharmacogenomics & Precision Medicine			
<b>C2.(Self Development)</b> Develop self-direction in problem-solving, decision-making, and critical thinking abilities for professional development and become independent lifelong learners.		- Medicinal Chemistry III -Pharmaceutics-I -Pharmaceutics-II -Pharmaceutical Biotechnology -Pharmaceutical Technology -Biopharmaceutics and Pharmacokinetics -Capstone course - IPPE &APPE -Capstone project	-Lifelong learner, -Educator and Health and wellness -Promoter, -Self-aware		
<b>C3. (Role in Context)</b> Exhibit Islamic behavior, moral and ethical attitudes consistent with the trust given to the profession by patients, other health care providers, and society.  <b>C4.</b> Practice Pharmaceutical Care Process in individualized and population-based care.		-Introduction and History of Pharmacy -Pharmacy Practice -Pharmacology and Therapeutics- I,II, III, IV& V -Professional Skills in Practice -Research Methodology & Biostatistics -Pharmacy Laws and Drug Regulations -Pharmacoepidemiology & Pharmacovigilance -Clinical Toxicology -Capstone course -IPPE &APPE	-Professional and ethical Provider		

BPharm Program Objectives mapping against Program Outcomes											
Program objectives	Program outcomes										
	Knowledge				Skills			Competencies			
	A1	A2	A3	A4	B1	B2	B3	C1	C2	C3	C4
1. Offer a highly motivated educational environment to provide the students with profound knowledge of various fundamental, pharmaceutical and clinical sciences.	√	√	√	√							
2. Develop the ability of the students to utilize the acquired knowledge to contribute productively in various fields of pharmaceutical and clinical settings.					√		√				
3. Produce graduates with professional skills needed to ensure effective communication with health care members, patients and community following professional code of ethics.						√					
4. Develop a highly competent, responsible, life-long learner pharmacist with the vision of continuous professional development.								√	√	√	

## 6. Study Plan for the BPharm Program

Dubai Pharmacy College for Girls accepts only female students with General Secondary School Certificate or its equivalent with science subjects (Physics, Chemistry, Biology, or Mathematics) for admission to Bachelor of Pharmacy degree program. The BPharm curriculum requires a minimum of 160 hours.

Dubai Pharmacy College for Girls grants its students, after successful completion, Bachelor's Degree in Pharmacy (B. Pharm.). The total program of Dubai Pharmacy College for Girls extends over four and half academic years and the maximum course duration to complete the degree within a reasonable time frame of six years.

The academic year starts in September and ends in the third week of July.

- Each academic year is divided into 3 semesters.
- The fall and spring semesters are composed of nineteen weeks of which 15 weeks devoted to teaching.
- Summer semester is composed of 4 weeks in which maximum 3 subjects only will be delivered (Third week of June-Third week of July)
- Each week has five teaching days which accounts for 30 teaching hours in a week.
- Advanced Professional Practice Experience to be provided in the last semester (fall semester of fifth year).

	No. of Courses	Credit Hours	%
Elective Courses	4	8	5 %
General Education Requirements	10	21	13.1%
Core Requirement	39	104	65.0%
Industrial training	1	1	0.6%
Introductory Professional Practice Experience (IPPE001 & 2) and Professional Practice Experience	3	24	15.0%
Capstone Project (CS)	1	2	1.3%
<b>Total</b>	<b>57</b>	<b>160</b>	<b>100%</b>

Domain	No. courses	Credit Hours	%
PS-Pharmaceutical Science	11.5	34	32.7%
CS-Clinical Science	22.5	57	54.8%
BBS-Basic Biomedical Sciences	5	13	12.5%
<b>Total</b>	<b>39</b>	<b>104</b>	<b>100%</b>



## 6.A. Distribution of Courses

### Academic Year 2021-2022

#### FIRST YEAR

##### Fall Semester

Code	Domain	Courses	Prerequisite	Corequisite	Lecture	Practical	Total Units
PN701	PS	Pharmaceutical Organic Chemistry- I	-	-	2	-	2
MC701	BBS	Anatomy and Physiology- I	-	-	2	-	2
GE701	GE	Mathematics and Statistics	-	-	2	-	2
GE702	GE	Medical Terminology and Information Literacy	-	-	3	-	3
GE703	GE	Computer Applications	-	-	-	2	2
GE704	GE	Islamic Studies	-	-	2	-	2
PC701	GE /PS	Introduction and History of Pharmacy	-	-	2	-	2
<b>TOTAL</b>			-	-	<b>13</b>	<b>2</b>	<b>15</b>

##### Spring Semester

Code	Domain	Courses	Prerequisite	Corequisite	Lecture	Practical	Total Units
PN702	PS	Pharmaceutical Organic Chemistry- II	PN701	-	2	1	3
CP701	CS	Social and Behavior Aspects in Pharmacy	GE704	-	2	-	2
GE705	GE	Positive Psychology	-	-	2	-	2
GE706	GE	Environmental Sustainability	-	-	2	-	2
PC702	PS	Pharmaceutics-I	PC701	-	3	1	4
MC702	BBS	Anatomy and Physiology-II	MC701	-	2	1	3
<b>TOTAL</b>			-	-	<b>13</b>	<b>3</b>	<b>16</b>

##### Summer Semester

Code	Domain	Courses	Prerequisite	Corequisite	Lecture	Practical	Total Units
GE707	GE	Arabic Language Skills		-	2	-	2
GE708	GE	UAE Society		-	2	-	2
EC7011/ EC7012	EC	Elective Area I		-	2	-	2
<b>Total</b>					<b>6</b>	<b>-</b>	<b>6</b>

### Academic Year 2022-2023

#### SECOND YEAR

##### Fall Semester

Code	Domain	Courses	Prerequisite	Corequisite	Lecture	Practical	Total Units
CP702	CS	Pharmacology and Therapeutics -I	MC701, MC702	-	3	1	4
PN703	PS	Medicinal Chemistry -I	PN702	-	3	-	3
MC703	BBS	Biochemistry	MC702	-	2	-	2
MC704	BBS	Microbiology and Immunology	-	-	3	1	4
PC703	PS	Pharmaceutics-II	PC701, PC702	-	3	1	4
<b>TOTAL</b>					<b>14</b>	<b>3</b>	<b>17</b>

##### Spring Semester

Code	Domain	Courses	Prerequisite	Corequisite	Lecture	Practical	Total Units
PN704	PS	Medicinal Chemistry -II	PN703	-	2	1	3
PC704	PS	Biopharmaceutics and Pharmacokinetic	PC702, PC703	-	3	0	3
CP703	CS	Clinical Biochemistry	MC703	-	2	1	3
CP704	CS	Pharmacology and Therapeutics-II	CP702	-	2	1	3
CP705	CS	Pharmacy Practice	PC701	-	2	1	3
MC705	BBS	Pathology	MC703	-	2	-	2
<b>TOTAL</b>					<b>13</b>	<b>4</b>	<b>17</b>

#### Introductory Professional Practice Experience (Summer Semester)

Code	Domain	No of Hours	No of Credit Hours
IPPE-01	CS	200	5



Academic Year 2023-2024							
THIRD YEAR							
Fall Semester							
Code	Domain	Courses	Prerequisite	Corequisite	Lecture	Practical	Total Units
PN705	PS	Medicinal Chemistry-III	PN704, MC704		3	-	3
PC705	PS	Pharmaceutical Technology	PC702, PC703	-	2	1	3
PC706	PS	Pharmaceutical Biotechnology	MC704, PC702		2	-	2
CP706	CS	Pharmacology and Therapeutics- III	CP704	-	3	1	4
CP707	CS	Applied Pharmacokinetics	PC704		2	-	2
CP708	CS	Alternative and Complementary Medicines	CP702, CP705, MC705	-	2	-	2
CP709	GE/CS	Research Methodology and Biostatistics	GE701, GE702, GE703		2		2
TOTAL					16	2	18
Spring Semester							
Code	Domain	Courses	Prerequisite	Corequisite	Lecture	Practical	Total Units
PN706	PS	Instrumental Analysis	PN704	-	2	1	3
CP710	CS	Pharmaceutical Care	CP701, CP703, CP706	-	2	-	2
CP711	CS	Pharmacology and Therapeutics- IV	MC704, CP706	-	2	1	3
CP712	CS	Pharmacogenomics & Precision Medicine	CP706	CP710	3	-	3
EC7021/EC7022	EC	Elective Area II			2		2
GE709	GE	Innovation and Entrepreneurship	-		2	-	2
TOTAL					13	2	15
Professional Practice Experience (Summer Semester)							
Code	Domain		No of Hours		No of Credit Hours		
IPPE-02	CS	Introductory Professional Practice Experience-Health care setting	120		3		
(INTR)	PS	Industrial Training	40		1		

Academic Year 2024-2025							
FOURTH YEAR							
Fall Semester							
Code	Domain	Courses	Prerequisite	Corequisite	Lecture	Practical	Total Units
CP713	CS	Hospital Pharmacy	CP707, CP710	-	2	-	2
CP714	CS	Pharmacy Laws and Drug Regulations	-	CP713	1	-	1
CP715	CS	Pharmacoepidemiology & Pharmacovigilance	CP709, CP710	-	2	-	2
CP716	CS	Clinical Toxicology	CP711	CP717	2	-	2
CP717	CS	Pharmacology and Therapeutics- V	CP711		2	1	3
CP718	CS	Natural Medicines Safety and Efficacy	CP702, CP704, CP706 , CP708, CP711	CP717	3	1	4
EC7031/EC7032	EC	Elective Area III			2		2
TOTAL					14	2	16
Spring Semester							
Code	Domain	Courses	Prerequisite	Corequisite	Lecture	Practical	Total Units
CP719	CS	Pharmaceutical Administration and Pharmacoeconomics	CP713		2	-	2
CP720	CS	Pharmacy Automation & Informatics	CP713		2	-	2
CP721	CS	Professional Skills in Practice	CP710, CP713	-	1	2	3
CP722	CS	Capstone course	CP702, CP704, CP706, CP708, CP710, CP711, CP711, CP717, CP718	CP721	-	2	2
CP723	CS	Calculations in Practice	PC702, PC703, PC704, CP709		2	-	2
CS701	CS/PS	Capstone Project	CP709		-	2	2
EC7041/EC7042	EC	Elective area IV			2		2
TOTAL					9	6	15

Advanced Professional Practice Experience (Fall semester) 2025-2026							
Code	Domain	Advanced Professional Practice Experience	No of Hours		No of Credit Hours		
APPE	CS	Advanced Professional Practice Experience	640		16		

## 7. Courses of Study in the BPharm program

General Education (GE)	21	Pharmaceutical Sciences (PS)	34
Mathematics and Statistics	2	Pharmaceutical Organic Chemistry- I	2
Medical Terminology and Information Literacy	3	Pharmaceutical Organic Chemistry- II	3
Islamic study	2	Medicinal Chemistry –I	3
Research Methodology	1	Pharmaceutics- I	4
Positive Psychology	2	Medicinal Chemistry –II	3
Computer Applications	2	Pharmaceutics-II	4
History of Pharmacy	1	Medicinal Chemistry-III	3
Arabic Language Skills	2	Instrumental Analysis	3
Environmental Sustainability	2	Pharmaceutical Biotechnology	2
UAE Society	2	Biopharmaceutics and Pharmacokinetic	3
Innovation and Entrepreneurship	2	Pharmaceutical Technology	3
<b>Basic Biomedical Sciences (BBS)</b>	<b>13</b>	Introduction to Pharmacy	1
Anatomy and Physiology- I	2	<b>Clinical Sciences (CS)</b>	<b>57</b>
Anatomy and Physiology -II	3	Clinical Biochemistry	3
Biochemistry	2	Social and behavior aspects in Pharmacy	2
Pathology	2	Pharmacology and Therapeutics- I	4
Microbiology and Immunology	4	Pharmacology and Therapeutics-II	3
<b>Professional Practice Experience (PPE)</b>	<b>25</b>	Alternative and Complementary Medicines	2
Introductory Professional Practice Experience (IPPE-01&IPPE-02)	8	Pharmacology and Therapeutics- III	4
Industrial Training (INTR)	1	Pharmaceutical Care	2
Advanced Professional Practice Experience (APPE)	16	Pharmacy Practice	3
<b>Electives (EC)*</b>	<b>8</b>	Clinical Toxicology	2
Elective (choose from Area-I)	2	Applied Pharmacokinetics	2
Elective (choose from Area-II)	2	Natural Medicines Safety and Efficacy	4
Elective (choose from Area-III)	2	Pharmacology and Therapeutics- IV	3
Elective (choose from Area-IV)	2	Pharmacogenomics & Precision Medicine	3
<b>Area I</b>		Biostatistics	1
EC7011 -Organizational Behavior and Cultural Diversity		Professional Skills in Practice	3
EC7012- Emotional Intelligence and Leadership		Hospital Pharmacy	2
<b>Area II</b>		Pharmacy Laws and Drug Regulations	1
EC7021 - Nuclear Pharmacy		Pharmacoepidemiology &Pharmacovigilance Pharmacology	2
EC7022 -Pharmacognosy and Phytochemistry		Pharmacology and Therapeutics-V	3
<b>Area III</b>		Pharmaceutical Administration and Pharmacoeconomics	2
EC7031 -Regulatory affairs		Pharmacy Automation & Informatics	2
EC7032 - GMP Guidelines in Pharmaceuticals		Capstone course	2
<b>Area IV</b>		Calculation in Practice	2
EC7041 -Nutrition and Health		<b>Capstone Project (CS)</b>	<b>2</b>
EC7042 - Bioassay		Capstone Project (CS)	2

## 8. Course Description

### GENERAL EDUCATION

<b>Mathematics and Statistics</b>	<b>Course Code: GE701</b>	<b>Credit Hours: 2+0</b>
The course will introduce basic mathematical concepts and calculations required for the subsequent studies of pharmaceutical and clinical calculations. The course includes introduction of critical mathematical concepts through the development of mathematical techniques. Students will be equipped with the skills needed to apply mathematical techniques correctly. Statistical concepts will be introduced helping students to analyze data using quantitative analysis techniques, measures of central tendency and measures of spread, samples and populations and histograms.		
<b>Medical Terminology and Information Literacy</b>	<b>Course Code: GE702</b>	<b>Credit Hours: 2+1</b>
Medicine has a very distinct and highly specialized language. It is necessary for any student wishing to pursue a successful career in the healthcare field to acquire comprehension in this system of communication. Medical Terminology is the study of the rules of medical word building. Students receive a thorough grounding in basic medical terminology through a study of root words, prefixes and suffixes. The study also focuses on correct pronunciation, spelling, abbreviations and use of medical terms. By the end of this course learners will be expected to have a basic comprehension of medical terms and be able to communicate accurately to the peers in the field. The Information Literacy course is designed to enable students skillfully analyze, evaluate, access, apply and synthesize information rather than merely memorizing and repeating it. This would help in the development of their critical thinking skill to solve problems, make decisions and deal effectively with social, scientific and practical problems of their academic, non – academic and professional lives. The course helps in making students lifelong learners.		
<b>Computer Applications</b>	<b>Course Code: GE703</b>	<b>Credit Hours: 0+2</b>
The aim of this course is to provide students, the ability to access e-learning tools with the help of the Learning Management System to facilitate remote online learning. It will provide students, the ability to format and document text, numeric data, referencing methods, presentation skills using MS. office applications while using technology to support educational goals and reinforcing skills that help them to demonstrate the responsible use of technology and an understanding of ethics and safety issues in using electronic media.		
<b>Islamic Studies</b>	<b>Course Code: GE704</b>	<b>Credit Hours: 2+0</b>
This Islamic studies course aims to give the students a comprehensive understanding of the main two sources of Islamic Legislation: Holy Qur'an and sunnah (Prophet Mohamed Hadith). This course deals with the definition of the Holy Qur'an with an explanation of selected Qur'anic verses, the definition of Sunnah with an explanation of selected Prophet's sayings (Hadith), study sections of the biography of the prophet (PBUH), and the definition of schools of jurisprudence and the reasons for their differences, with an indication of the most important sources and references of Islamic studies.		
<b>Positive Psychology</b>	<b>Course Code: GE705</b>	<b>Credit Hours: 2+0</b>
The proposed course aims at enriching the students regarding positive aspect of human nature. It also covers subjective state of well-being, optimism and emotional intelligence that facilitates the development of human resource in any society. In the course, students will have the opportunities to reflect on their life experiences and will be encouraged to apply the learned skills and attitudes to contribute to their present and future life contexts, such as family, schools, communities, and workplaces.		
<b>Environmental Sustainability</b>	<b>Course Code: GE706</b>	<b>Credit Hours: 2+0</b>
The course introduces the global environmental issues linked to different climatic factors. The course covers current global environmental issues related to ecological factors and studies the importance of renewable and alternative sources of energy. It also examines major threats posed by the environment due to climatic changes.		
<b>Arabic Language Skills</b>	<b>Course Code: GE707</b>	<b>Credit Hours: 2+0</b>
The course provides the students to acquire basic language skills (e.g., grammar, eloquence, and spelling) and paying attention to linguistic methods and correcting mistakes.		
<b>UAE Society</b>	<b>Course Code: GE708</b>	<b>Credit Hours: 2+0</b>
This course provides basic information concerning contemporary life in the UAE and the major social change taking place since the establishment of the federation until this day. The students will be able to know the historical framework to the inception of UAE, its political system, economy, family, migration, population, woman, youth, and the development of civil society.		
<b>Innovation and Entrepreneurship</b>	<b>Course Code: GE709</b>	<b>Credit Hours: 2+0</b>
This course aims to provide the students with an overview of the key concepts of strategic planning as a fundamental component of the Innovation & Entrepreneurship.		



General Education/Pharmaceutical Sciences (GE/PS)		
<b>Introduction and History of Pharmacy</b>	<b>Course Code: PC701</b>	<b>Credit Hours: 1+1</b>
This course introduces the student to the profession of pharmacy and the role of the pharmacist within health care delivery systems, it gives preview about the history of pharmacy and the different historical Eras, the essential contributions of the ancient people and cultures to the evolution of the profession. Also, it describes the legislative, ethical and professional standards in which the profession of pharmacy operates. The calculation of concentration expressions. This course also introduces basic concepts in pharmaceutics including discussion on dosage forms design, routes of drug administration, pharmaceutical preparations, medical prescription, labelling of medications and pharmaceutical Latin abbreviations. Besides, the course teaches extemporaneous dispensing and the fundamentals in the calculation of concentration expressions		
General Education/ Clinical Sciences (GE/CS)		
<b>Research Methodology&amp; Biostatistics</b>	<b>Course Code: CP709</b>	<b>Credit Hours:1+1</b>
This is an intensive introductory course to understand the basic concepts of pharmaceutical, clinical research & statistical methods used in applied research. This helps the students in getting acquainted with different research strategies and identifying potential research plans that will help them in their future research projects. This course helps the students to develop the writing skills of the research proposal, reports, thesis & articles in international standards. The course familiarizes the students with the use of a statistical package and gives them the skills needed for effective data management, data manipulation, data analysis at a basic level. The course will develop basic skills in the use of a statistical package through classroom demonstrations and independent lab		

BASIC BIOMEDICAL SCIENCES		
<b>Anatomy and Physiology-I</b>	<b>Course Code: MC701</b>	<b>Credit Hours: 2+0</b>
The course offers a comprehensive knowledge of the structure and function of the human cell, integumentary, Blood, skeletal, muscular and nervous systems. The information offered by the course forms the foundations for further understanding of pharmacology, pathology, pathophysiology, and medicine. It gives the student an opportunity to develop into an independent learner and researcher.		
<b>Anatomy and Physiology-II</b>	<b>Course Code: MC702</b>	<b>Credit Hours: 2+1</b>
The course offers a comprehensive knowledge of the structure and function of the digestive, cardiovascular, respiratory, renal system, endocrine and reproductive systems. The information offered by the course forms the foundations for further understanding of pharmacology, pathology, pathophysiology, and medicine. It gives the student an opportunity to develop into an independent learner and researcher.		
<b>Biochemistry</b>	<b>Course Code: MC703</b>	<b>Credit Hours: 2+0</b>
The course provides the Pharmacy students with the knowledge to understand the mechanisms of life, acid-base balance, structure-function relationship and clinical correlation of different bio molecules including carbohydrate, lipids, amino acids, proteins, enzymes, haemoglobin and fibrous proteins and ultimately energy production through oxidative phosphorylation reactions in the mitochondrial electron transport chain.		
<b>Microbiology &amp; Immunology</b>	<b>Course Code: MC704</b>	<b>Credit Hours: 3+1</b>
The aim of this course is to establish the student's basic understanding in the principles of microbiology and immunology. This course delivers information about different microbial species that cause human disease such as bacteria, fungi, and viruses and discusses current topics including antibiotic resistance and public health threats. Various issues related to sterilization & sterility-testing of pharmacopeial preparations will also be reviewed. The course also provides the student an understanding of immune system, important theories of immunology and the different types of failures of immune system. Laboratory focuses on the fundamental microbiological techniques.		
<b>Pathology</b>	<b>Course Code: MC705</b>	<b>Credit Hours: 2+0</b>
The course provides the students with the basic knowledge and conceptual understanding of the pathology of various diseases. Thus the student will be familiar with the names, classification, pathogenesis and pathological changes in the various body tissues in different diseases.		



PHARMACEUTICAL SCIENCES (PS)		
<b>Pharmaceutical Organic Chemistry- I</b>	<b>Course Code: PN701</b>	<b>Credit Hours: 2+0</b>
This course describes the structure of atoms, atomic orbital, hybridization, types of chemical bonding, the polarity of bond and its relationship with the electronegativity of the element. It also covers the reaction mechanism involves homolytic and heterolytic bond cleavages in a chemical reaction, production of free radicals and their stability. This course also describes the resonance structure, substituents effect on the resonance, types of isomerism and their effect on the optical activity of organic molecules.		
<b>Pharmaceutical Organic Chemistry- II</b>	<b>Course Code: PN702</b>	<b>Credit Hours: 2+1</b>
This course describes the structural configuration, nomenclature, physical properties, preparation methods, and chemical reactions/reaction mechanism of different functional groups as an aliphatic, aromatic hydrocarbon, substituted hydrocarbons, polynuclear hydrocarbons, esters, ethers, thioethers, alcohols, carboxylic acids, aldehydes, ketones, amines, diazonium salts and heterocyclic compounds. Laboratories include identification of functional groups of different organic molecules and preparation of selected organic compounds, their separation, purification and identification.		
<b>Medicinal Chemistry-I</b>	<b>Course Code: PN703</b>	<b>Credit Hours: 3+0</b>
Medicinal chemistry is the application of chemistry in the context of human medicine. This course describes the physiochemical, stereo-chemical aspects of drug action and biotransformation chemical reactions of phase I and phases II. This course also describes the chemistry of pharmacophore and structure-activity relationship of several classes of drugs that affecting the cardiovascular system (cardiac glycosides, antianginal, antiarrhythmic and antilipidemic agents, anticoagulants, antiplatelets, and diuretics), cholinergic, adrenergic neurotransmission, and stimulating central nervous system. In this course, a student will gain knowledge about how the structure of a drug relates to its intermolecular drug-receptor interactions/biological activity and metabolism. Students will also gain knowledge about drug designing and synthesis of different classes of medicinal agents.		
<b>Medicinal Chemistry-II</b>	<b>Course Code: PN704</b>	<b>Credit Hours: 2+1</b>
This course describes the medicinal chemistry of centrally acting drugs that includes opiate analgesics, nonsteroidal anti-inflammatory agents analgesic-antipyretics, sedatives-hypnotics, antiepileptics, general anaesthetics, psychotherapeutic drugs, antiparkinsonian and skeletal muscle relaxant. It also describes the drugs that affect neuronal transmission as local anaesthetics. In this course student will gain knowledge about how the structure of a drug relates to its physicochemical properties, intermolecular drug-receptor interactions lead to pharmacological activity and metabolism. Students will also gain knowledge and skills about drug designing, synthesis and analysis of different classes of medicinal agents.		
<b>Medicinal Chemistry-III</b>	<b>Course Code: PN705</b>	<b>Credit Hours: 3+0</b>
This course describes the medicinal chemistry of beta-lactam antibiotics, antimicrobial agents, antimalarial, antifungal, antiviral and antineoplastic agents. It also describes the drugs affecting the immune system as antihistamines and antiulcer agents, the endocrine system as insulin and oral hypoglycemic drugs, steroid hormones and therapeutically related drugs (corticosteroids, sex hormones) and thyroid drugs. In this course student will gain knowledge about the development of lead compound and how the structure of a drug relates to its physicochemical-pharmacokinetic properties, drug-receptor interaction leads to biological activity and pharmacological-clinical uses.		
<b>Instrumental Analysis</b>	<b>Course Code: PN706</b>	<b>Credit Hours: 2+1</b>
This course is an introduction to modern instrumental methods of chemical and pharmaceutical analysis. It describes the theory of operation, instrument design and methodology, and applications of spectroscopic techniques of UV/VIS, Fluorescence, FTIR, AAS, MS, and NMR, and chromatographic methods that include gas and liquid chromatography. Laboratory includes the application of instruments in the analysis of chemicals, drugs, supplements and medicinal agents.		
<b>Pharmaceutics-I</b>	<b>Course Code: PC702</b>	<b>Credit Hours: 3+1</b>
The course is designed to provide the students with the theoretical and practical principles of the pharmaceutical dosage forms concerning their advantages and limitations, types and functions of excipients, preparation techniques, formulation strategies, and final product packaging and stability. The course deals with liquid dosage forms as aqueous and non-aqueous solutions, suspensions, emulsions, and sterile parenteral and ophthalmic dosage forms. The basic physical characteristics and calculations required in the formulation of the mentioned dosage forms are also discussed. Besides, students are initially exposed to modern formulation technology and innovations in pharmaceutical dosage forms and drug delivery systems.		
<b>Pharmaceutics-II</b>	<b>Course Code: PC703</b>	<b>Credit Hours: 3+1</b>

This course is designed to cover different pharmaceutical dosage forms, their properties, characterization and methods for the production of finished pharmaceuticals. It includes semisolid dosage forms, including creams, ointments, gels, and pastes. Furthermore, the course discusses topics related to solid dosage and modified solid dosage forms in terms of their production, manufacturing methods, machinery and evaluation of the final product. Also, it provides background knowledge in respiratory dosage forms and some advanced nanoparticles. The Lab component of this course is designed to provide extensive practical exposure in development & evaluation of such dosage forms.

<b>Biopharmaceutics and Pharmacokinetics</b>	<b>Course Code: PC704</b>	<b>Credit Hours: 3+0</b>
The major focus in biopharmaceutics will be concentrated on the various in vitro and in vivo factors that can affect drug performance in the body during the processes of liberation, absorption, distribution, metabolism, excretion with the purpose of evaluation of drug delivery systems, and the therapeutic management of patients. The pharmacokinetics section of the course provides a conceptual and quantitative background in pharmacokinetic theory and applications needed to pursue advanced studies in clinical pharmacokinetics.		
<b>Pharmaceutical Technology</b>	<b>Course Code: PC705</b>	<b>Credit Hours: 2+1</b>
The course is designed to provide students with proper knowledge in various aspects in the pharmaceutical technology including pre-formulation studies of solid dosage forms, manufacturing processes as granulation, drying and filtration. Packaging technology and its effect on medicine safety, effectiveness, and patients' compliance are also discussed. The course also focuses on the development of new drug delivery systems such as matrix solid dispersions, transdermal patches, and microspheres		
<b>Pharmaceutical Biotechnology</b>	<b>Course Code: PC706</b>	<b>Credit Hours: 2+0</b>
This course delivers up-to-date information about different biotechnological processes (Recombinant DNA, enzyme, hybridoma, and fermentation technology) involved in the development of therapeutic proteins, peptides, and gene products. It also discusses various issues related to the development and delivery of these stable biotechnological products in humans.		

<b>CLINICAL SCIENCES (CS)</b>		
<b>Social and Behavior Aspects in Pharmacy</b>	<b>Course Code: CP701</b>	<b>Credit Hours: 2+0</b>
The course introduces sociological, psychological, and behavioural aspects of pharmacy practice regarding patients' perspectives of health and illness, as well as their implications for pharmacists' roles. Variability in patients' individual needs and relationships with health care providers. It brings more knowledge of human behaviour to the students. It provides improved ways and means for students to learn about the nature of the multiple factors: social, culture & psychological, which affect the maintenance of health and the prevention of disease and disability. This will help in promoting health, preventing illness, restoring health and alleviating suffering.		
<b>Pharmacology &amp; Therapeutics-I</b>	<b>Course Code: CP702</b>	<b>Credit Hours: 3+1</b>
The course provides knowledge of basic principles of pharmacokinetics and pharmacodynamics of medications and their therapeutic application. An in-depth discussion of concepts of importance in pharmacology is emphasized. The principles of the drugs affecting autonomic nervous system are discussed. Autacoids and anti-inflammatory medications (NSAIDs & Corticosteroids) are also covered. In addition, the course provides the clinical characteristics of peptic ulcer and inflammatory bowel disease. Finally, the pharmacologic benefits of medications in each disease, the management guidelines, treatment algorithms, and patient educations of the studied disorders are fully covered.		
<b>Clinical Biochemistry</b>	<b>Course Code: CP703</b>	<b>Credit Hours: 2+1</b>
The course provides to the pharmacy students the knowledge and advances understanding of the metabolic pathways of different biomolecules and related clinical correlations in addition to the integration of metabolic reactions in different human tissues and different physiological and pathological conditions.		
<b>Pharmacology and Therapeutics-II</b>	<b>Course Code: CP704</b>	<b>Credit Hours: 3+1</b>

The course deals with the principles of the common cardiovascular diseases describing the causes of hypertension, the major determinants which control coronary blood flow, and the etiology of heart failure. Then, the course provides the clinical characteristics (mechanism of action, benefits, adverse effects, interactions, and contraindications) of beta blockers,  $\alpha$ -blocker, diuretics, vasodilators, calcium channel blockers, nitrates, ACE inhibitors, ARBs, cardiac glycosides and antiarrhythmics. Finally, the pharmacologic benefits of medications in each disease, the management guidelines, treatment algorithms, and patient educations of the studied disorders are fully covered.

<b>Pharmacy Practice</b>	<b>Course Code: CP705</b>	<b>Credit Hours: 3+1</b>
This course introduces students to various aspects of pharmacy practice. It covers the knowledge of minor diseases that can be managed by the pharmacist concerning aetiology, symptoms, diagnosis, treatment, management and counselling. Moreover, the student will learn the different types of over-the-counter (OTC) medications used for a variety of medical cases, such as respiratory and GIT systems, skin and dental care, ears, eyes, nose and throat (ENT) problems, as well as pain management. Further areas of learning are women's health, children's care, and smoking cessation. This course will also provide the student with professional communication skills needed to deal with patients in the hospital and community pharmacy settings during an OTC therapeutic dialogue.		
<b>Pharmacology and Therapeutics-III</b>	<b>Course Code: CP706</b>	<b>Credit Hours: 3+1</b>
This course is designed to provide students with broad understanding of central nervous system pharmacology in addition to the pharmacology, pathophysiology, clinical pharmacokinetic and pharmacotherapy in major area of endocrinology with special emphasis on the thyroid disorders. The course includes practical classes using case-based approaches related to the topics of this course. The course will be taught concurrently with Applied Pharmacokinetics to offer the maximum benefit of integrated knowledge.		
<b>Applied Pharmacokinetics</b>	<b>Course Code: CP707</b>	<b>Credit Hours: 2+0</b>
The course deals with the concepts of the clinical pharmacokinetics of certain drugs and calculation of doses of drugs during organ impairment and clinical transplant pharmacokinetics and therapeutic drug monitoring, drug administration, alteration of dosage form and doses based on individualization and population data, approach to therapeutic drug monitoring, a case study of drugs requiring therapeutic monitoring.		
<b>Alternative and Complementary Medicines</b>	<b>Course Code: CP708</b>	<b>Credit Hours: 2+0</b>
Alternative and Complementary Medicines course provides the students a broad range of complementary therapies and how these can be utilized to enhance health. The students will be able to locate and evaluate credible information about complementary therapies and wellness. This course also covers the treatment of different diseases by herbal therapy, dietary health supplements, aromatherapy, relaxation therapy, minerals and vitamins supply, acupressure, ayurvedic medicine therapy, homoeopathy and hydrotherapy.		
<b>Pharmaceutical Care</b>	<b>Course Code: CP710</b>	<b>Credit Hours: 2+0</b>
This course provides the knowledge and experience that enables the students to understand and describe clinical pharmacy and pharmaceutical care practice aspects. The aim of this course is to provide the students with the skills of treatment assessment, care plan developing and follow up evaluation. Also, the student will be provide with the skills of identifying different types of patients drug related needs, different types of drug related problems and taking decision with ethical considerations in the practice of clinical pharmacy.		
<b>Pharmacology and Therapeutics-IV</b>	<b>Course Code: CP711</b>	<b>Credit Hours: 3+1</b>
This course is designed to provide students with integrated knowledge of basic pharmacology of various classes of antibacterial, antiviral, antifungal and chemotherapeutic agents. Focus is emphasized on main indication of each antimicrobial, its significant adverse effect and precautions to avoid drug resistance. Furthermore, the course covers the management of selected infectious diseases based on evidence-based guidelines including lower respiratory tract, urinary tract, CNS, opportunistic infections as well as HIV.		
<b>Pharmacogenomics &amp; Precision Medicine</b>	<b>Course Code: CP712</b>	<b>Credit Hours: 3+0</b>

<p>The goal of the course is to give students an understanding of the principles of human genetics and genomics as they apply it to find solutions in drug therapy optimization and patient care, thus providing basic understanding of discipline of pharmacogenomics. This course discusses genetic basis of variability in drug response that contribute to drug efficacy and toxicity, adverse drug reactions and drug-gene interaction. As such, pharmacists need a thorough understanding of the genetic component of patient variability to deliver effective individualized pharmaceutical care.</p>		
<b>Hospital Pharmacy</b>	<b>Course Code: CP713</b>	<b>Credit Hours: 2+0</b>
<p>The aim of this course is to provide the students with knowledge of the principles of pharmacy practice in a hospital setting. It aims to enable students to gain knowledge to practice in various areas of hospital pharmacy including understanding the basic layout of the pharmacy department in a hospital setting; understanding the roles of the pharmacist in hospital practice including the distribution of medications, medication compounding, collaborations as a member of the healthcare team, and other patient care services, identifying and reporting any possible drug interactions and mastering the administrative part of hospital pharmacy services including drug distribution control system &amp; unit Dose Systems.</p>		
<b>Pharmacy Laws and Drug Regulations</b>	<b>Course Code: CP714</b>	<b>Credit Hours: 1+0</b>
<p>The course covers various policies, laws &amp; regulations related to pharmacy practice and pharmacy professionals dealing with licensing, pharmacy operations, controlled substances, and operations in institutions. A Brief overview of the legal system including nature and sources of UAE laws on practicing pharmaceutical profession and trading in a medicine profession.</p>		
<b>Pharmacoepidemiology &amp; Pharmacovigilance</b>	<b>Course Code: CP715</b>	<b>Credit Hours: 2+0</b>
<p>This is an introductory course, which equips students with a basic understanding of the concepts and practice of pharmacoepidemiology and pharmacovigilance in areas related to the assessment of drug safety and risk-benefit of drug use. This course will meet the needs of a wide variety of practitioners in detecting, managing, reporting of Adverse Drug Events/Reactions.</p>		
<b>Clinical Toxicology</b>	<b>Course Code: CP716</b>	<b>Credit Hours: 2+0</b>
<p>The course is intended to empower students with basic knowledge of Clinical Toxicology. The major focus of the course is on basic principles, mechanisms, and common approaches for the management of poisoned patients. Selected topics are covered in this course that includes occupational, heavy metals and drug toxicities. Students will gain knowledge of how selected chemicals/drugs exert toxic effects, present and managed clinically.</p>		
<b>Pharmacology and Therapeutics-V</b>	<b>Course Code: CP717</b>	<b>Credit Hours: 2+1</b>
<p>This course is designed to provide students with comprehensive understanding of respiratory system disorders (i.e. asthma and chronic obstructive pulmonary disease; COPD), diabetes mellitus, rheumatologic diseases (i.e. osteoarthritis, rheumatoid arthritis, gout &amp; hyperuricemia) and osteoporosis. In the scope of these domains, the students will be learning the pharmacology, pathophysiology, clinical pharmacokinetic and pharmacotherapy in each domain with special emphasis on the diabetes mellitus and asthma. The course includes practical classes using case-based approaches related to the topics of this course. The course will provide the students with solid background about the different clinical practice essentials when multiple co-morbidities are existing.</p>		
<b>Natural Medicines Safety and Efficacy</b>	<b>Course Code: CP718</b>	<b>Credit Hours: 3+1</b>
<p>Natural medicines are types of medicines that are obtained from natural sources like plants, animals, fungi, or marine products for the treatment of some Diseases. Natural medicines are considered as important alternative to modern medicine. The aim of this course is to provide the students information about the international guidelines for assessing the quality, safety and the efficacy of natural medicines that present in the pharmaceutical markets, according to WHO. In addition, it provides the students information on the potential health benefits of natural medicines, their pharmacological action, folkloric uses, clinical studies, contraindications, side effects, interaction with other drugs, name of the supplement/s methods of preparation and the safe doses.</p>		
<b>Pharmaceutical Administration and Pharmacoeconomics</b>	<b>Course Code: CP719</b>	<b>Credit Hours: 2+0</b>
<p>The aim of this course is to provide the students with the working knowledge and fundamental principles of management related to pharmacy practice leadership. During this course, students are exposed to various administrative skills, strategic planning, motivational theories and risk management, which enable them to efficiently manage health care sectors. This</p>		



course also covers the introduction of macroeconomics pharmacoeconomics, need and practice of pharmacoeconomic analyses in drug management, basic types of pharmacoeconomic analyses, drug utilization studies		
<b>Pharmacy Automation &amp; Informatics</b>	<b>Course Code: CP720</b>	<b>Credit Hours: 2+0</b>
This course will be conducted in collaboration with automation industry to introduce the concept of automation in pharmacy like robotic pharmacy, use of mobile health tools, clinical software applications ("clinical apps"), and other associated devices used by clinicians and patients for patient care. This course acquaints with cyber-security systems and procedures for vulnerabilities. This course also supports key decision-making roles for pharmacists in the planning, selection, design, implementation, and maintenance of medication-use information systems, electronic health records.		
<b>Professional Skills in Practice</b>	<b>Course Code: CP721</b>	<b>Credit Hours: 1+2</b>
The aim of this course is to provide the students with the knowledge of the various health care providers, rapidly evolving types of healthcare delivery systems, and complexities of relationships among the various health care professionals working within the health care system. Students should be aware of the basic clinical skills required by pharmacists to get the insight they need to cultivate informed, compassionate and effective patient care.		
<b>Capstone course</b>	<b>Course Code: CP722</b>	<b>Credit Hours: 0+2</b>
This course helps in exploring the creativity of the students with a variety of realistic requirements and constraints in developing clinical pharmacy activities. The course is clinically oriented to emphasize the safety and efficacy in patient care. This course works with various elements of pharmaceutical care identified in the courses learned in all semesters to arrange and combine them to form a new concept (i.e., thinking outside the box), developing a creative, unique solution to the problem. This course integrates the problem based and project-based learning such as the challenges, effective learning through enquiry. This course collaboratively applies real world and theoretical knowledge to solve a problem.		
<b>Calculation in Practice</b>	<b>Course Code: CP723</b>	<b>Credit Hours: 0+2</b>
The aim of this course is to provide clear instructions of calculations to pharmacy students with thorough revision, and enabling them to perform flawless calculations accurately which develops confidence in them. Since pharmacist use calculations regularly in their practice, it is vital that they are able to employ calculation skills precisely so as not to compromise patient safety. Therefore the students should get a mandatory pass in this course before getting graduation.		

<b>Professional Practice Experience (PPE) - Credit Hours: 24</b>	
<b>IPPE01:</b> Introductory Professional Practice Experience for 200 hours during the summer semester in the second year of BPharm.	
<b>IPPE02:</b> Introductory Professional Practice Experience-Healthcare setting for 120 hours ( Health Care) Summer semester Year 3	
<b>APPE:</b> Advanced Professional Practice Experience 640 hours during the Fall semester of the fifth year of BPharm.	
<b>Industrial Training: INTR,</b> 40 hours in summer semester Year 3	

<b>Capstone Project</b>		
<b>Capstone Project</b>	<b>Course Code: CS701</b>	<b>Credit Hours: 0+2</b>
In the final phase of their studies, students have to present a project based on all-round knowledge they have acquired in different areas of pharmaceutical sciences. The presented project is evaluated, and the students are assessed for their knowledge by a panel of internal and external examiners.		

<b>ELECTIVE COURSES</b>		
<b>AREA I</b>		
<b>Organizational Behavior and Cultural Diversity</b>	<b>Course Code: EC7011</b>	<b>Credit Hours: 2+0</b>
This course exposes students to behavioural science theories and applications in management. Organizational behavior is an interdisciplinary field drawing from numerous disciplines including psychology, sociology, economics, organization theory and many others. Organization behavior helps the student to learn the value-added of "soft" management interventions. Understand and articulate how culture, society, and diversity shape the role of the individual within society and human relations across cultures. In addition, the course aims to provide the students with an overview of the key concepts of strategic planning as a fundamental component of the Innovation & Entrepreneurship.		



<b>Emotional Intelligence and Leadership</b>	<b>Course Code: EC7012</b>	<b>Credit Hours: 2+0</b>
The course is designed to enable students to equip with the knowledge, skills, perspectives, and attitudes to achieve desired leadership outcomes across the three EIL facets which are the consciousness of self, consciousness of others, and consciousness of context. Across three EIL facets are nineteen capacities. Through the idea of EI and leadership, this course provides students a framework, a toolbox, and a guide for seeing the unique capacity in themselves to make a difference in the lives of others.		
<b>AREA II</b>		
<b>Nuclear Pharmacy</b>	<b>Course Code: EC7021</b>	<b>Credit Hours: 2+0</b>
Nuclear pharmacy is a speciality area of pharmacy practise dedicated to the compounding and dispensing of radioactive materials for use in nuclear medicine procedures. This course covers basic concepts involved with radioactivity, different types of radiations, radiation dose, nuclear medicines, and diagnostic & therapeutic applications of nuclear medicines.		
<b>Pharmacognosy and Phytochemistry</b>	<b>Course Code: EC7022</b>	<b>Credit Hours: 2+0</b>
Pharmacognosy & Phytochemistry course introduces the pharmacy students to the concept of the drugs derived from natural resources according to their biosynthetic origin as well to impart an understanding of natural product structures and the way they are put together in living organisms. The student should be aware with different methods of extraction, Isolation/identification as well as with the biological activities of the plant constituents of the acetate-malonate and shikimic acid pathways and the drugs containing these constituents. Therapeutic and toxicological activities of the secondary metabolites are also discussed in this course.		
<b>AREA III</b>		
<b>Regulatory Affairs</b>	<b>Course Code: EC7031</b>	<b>Credit Hours: 2+0</b>
This course introduces students to various aspects of Regulatory affairs. It covers the knowledge of the regulations and guidelines related to health care products ( pharmaceuticals , medical devices and cosmetics ) and the related component authorities/ agencies in Europe and GCC countries. This course will offer the B. Pharm graduate to work as Regulatory affairs specialist in health care entities		
<b>Pharmaceutical GMP</b>	<b>Course Code: EC7032</b>	<b>Credit Hours: 2+0</b>
This course provides a comprehensive overview on the Good Manufacturing Practice (GMP) in manufacturing process and quality control testing of the pharmaceutical products. It covers various aspects of quality control and quality assurance as well as industry standards in the areas of contamination control and microbiology in the workplace, warehousing, production, packaging cleaning and sanitation, documentation and records archiving. Students will also be introduced to GMP audit plan and techniques in addition to the key concepts, facilities and requirements to Good Laboratory Practice (GLP). The instructor will deliver the course contents by multiple learning activities such as didactic lectures, self-learning, class discussion and tutorials. While students' performance will be evaluated via different assessment instruments including class activity, quizzes and written exams.		
<b>Area IV</b>		
<b>Nutrition and Health</b>	<b>Course Code: EC7041</b>	<b>Credit Hours: 2+0</b>
Nutrition and Health course provides the pharmacy students basics of nutrition by discussing the nutrients, their function in the human body and their sources in the diet. This course gives the students an understanding of the causes behind health issue related to nutrition. The course makes the students aware about what to eat and how to choose healthy foods. The course also makes the students to solve nutrition-related problems and make healthy food and nutrition decisions.		
<b>Bioassay</b>	<b>Course Code: EC7042</b>	<b>Credit Hours: 2+0</b>
The course provides basics of tests applied in screening of new substances or herbal extracts. It also focuses on clarification of the basic concepts of biological assay of drugs based on their pharmacological classification. Experiments applied to assess many drug classes like autonomic-acting agents, anti-histaminics, anti-inflammatory, antihypertensive agents, analgesics and neuroleptics are fully discussed.		



## 9.Examination, Grading & Assessment

### Course Assessment

Each course is assessed as outlined in the course description form and can be further discussed with the course coordinator.

### Types of Assessment:

**Written Examination (Mid semester and Final exam):** Written examination assures that students have attained the appropriate knowledge related to the profession which can be applied in learning the skills. These exams measure the comprehension of students and their improvement.

**Oral exam:** The oral evaluation gives feedback from the students on how they see the relative importance of the different topics. The oral exam is suitable for many types of performance and for working with different competencies. If students' oral communication in a specific area or in general is essential, an oral exam is to be preferred.

**Practical and laboratory work:** The practical exam evaluates the skills gained by the student which they have learned in all over the practical sessions offered in the course. It identifies the student's level of performance while demonstrating well-developed skills.

**Assignment:** Assignments are evaluated through rubric scores based on different criteria's. It helps to measure the student's ability to understand the theoretical knowledge in depth. Assignments assess the student's ability to gather the information, processing, interpreting and drawing conclusions.

**Case study:** A specific and detailed description of an event, situation, or circumstance that is presented to a student for study and analysis.

**Scientific Poster:** A large, printed sheet intended for display and containing words, illustrations, or both to provide general or specific information for broad or targeted students.

**Herbarium:** A systematically arranged collection of dried plants.

**OSCEs:** A type of examination often used in health sciences. It is designed to test clinical skill performance and competence in a range of skills.

**Professional Practice Experience reports:** By the PPE reports the students to develop observation and recording skills. Students' efficiencies can be measured through the submitted reports, which give the detail of students learning activities during the training.

**Article review and Presentation:** Students ability to appraise the literature will be assessed based on their interpretation and presentation of a research paper.

**Self- learning assessment:** Students develop their own list of characteristics and judge their own work. Students learn to monitor their own progress and will strive to improve.

**PBL:** Students active participation, involvement in the group discussion will be peer assessed and also assessed by the instructor. Observations will be recorded as a narrative and highly structured format, such

as a checklist. Students knowledge applied in the problem-based discussions will be assessed through quiz (teaching and assessment methodologies are presented in the related course descriptor).

### Capstone Project:

A project submitted by the students in the fourth year of B. Pharm., based on all round knowledge they have acquired in the four main areas viz., Pharmaceutics, Pharmaceutical Medicinal Chemistry, Natural Products, Pharmacology, Therapeutics and Clinical. This project includes a research work, which the students carry out on recent developments in pharmaceutical sciences.

### Examination Schedule:

The students shall take their exams as per the schedule fixed by the College in the light of the following rules and regulations: Final exams will be held at the end of the semesters (Fall and Spring), on completion of the prescribed syllabus.

### Re-sit Exams:

- Re-sit exams for all the subjects considered necessary shall be held at the end of the second semester within a week after the declaration of the examination results.
- Not more than one re-sit exam for any subject shall be allowed within one academic year.

### Course Grading System:

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

Range of Marks	Grade Point	For BPharm	
		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	B
75 – 79.99	2.50	Satisfactory	C+
70 – 74.99	2.00	Pass	C
65 – 69.99	1.5	Unsatisfactory	D+
60 – 64.99	1.0	Unsatisfactory	D
Below 60	Failed	Failed	F
Administrative Codes			
Incomplete		I	
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.
- By contrast, the GPA is the average of grade points of all courses in one semester, whether she passed or failed the course.
- As mentioned earlier, the CGPA is the average of grade points of all courses in all semesters.



- Both GPA and CGPA are rounded to the nearest decimal units. GPA and CGPA are calculated according to the following formula

<b>GPA =</b>	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
<b>CGPA =</b>	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

<b>GPA / CGPA</b>	<b>B. Pharm</b>
	<b>Evaluation</b>
3.75 - 4.00	Outstanding
3.74 - 3.60	Excellent
3.00 - 3.59	Very Good
2.50 - 2.99	Good
2.00 - 2.49	Satisfactory
Less than 2.00	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.
- Grade "I" is granted to the student if the average marks of the course work is not less than 60%.
- Requests for an "I" grade is made on a form available from Dean's office
- Unless otherwise stated on the form, the work required to remove an "I" grade is to be completed no later than the end of the second week of the next semester in which the student registers at the university. Otherwise, a grade of "F" is recorded.
- (For Credit System students only) after the two weeks add/drop period, and 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.

### DISCIPLINARY MEASURES

Violation of the examination rules, attempts of misleading conduct, disturbing behaviour or disruption of the examination will be reported to the Disciplinary committee. Disciplinary measures may be imposed, singly or in combination, for non-academic misconduct include, but are not limited to, the following:

**(a) Warning or reprimand** – a written warning or reprimand to the student will be issued in case of inappropriate behavior

**(b) Debarring or cancellation**– If caught cheating (first time) the student will be debarred from taking all the paper of the applicable exam; for e.g., mid-term or finals respectively. All the exams undertaken by the candidate will be cancelled.

**(c) Suspension from the College** – If caught cheating (second time), will result in suspension of the student from the College for a specified period of time of two months after which the student is eligible to return. Conditions for readmission may be imposed.

**(d) Expulsion from the College** – If caught cheating (third time), Expulsion of the student from the College.



## ENSURING ACADEMIC INTEGRITY AT DPCG

- ✓ Current college policies prohibit dishonesty, such as cheating, plagiarism, or knowingly furnishing false information to the college. DPCG's recommended discipline process with regard to plagiarism and cheating is available from the Office of the Chief Academic Officer (BPharm) / Program Director (MPharm). Course syllabi should reference the process.
- ✓ When addressing plagiarism or cheating with reasonable evidence, the faculty member should notify the student of the concern.
- ✓ In situations where cheating or plagiarism has occurred, the faculty member is to determine consequences in compliance with DPCG policy and regulations, which prohibit dropping a student from a course. The consequences may be any of the following options:
  - ✓ giving the student a verbal or written warning giving the student an additional assignment
  - ✓ giving the student a zero on the assignment
  - ✓ determining other appropriate consequences that comply with DPCG's policy and regulations
- ✓ In such situations the faculty notifies the student that a "Student Code of Conduct Violation" form (DP-F-01) will be filed in the Dean's Office.
- ✓ Students have the right to grieve an action that they feel violates their student rights.
- ✓ The office of the Student Affairs shall be responsible for maintaining records.
- ✓ Probation, suspension or expulsions are courses of action that may be determined by the Dean , in accordance with Student Disciplinary Committee.

## 9.1.Scheme of Assessment

Semester	Code	Domain	Courses	Lecture	Practical	Total Units	Assessment Tools																			
							Quizzes	Oral	PBL assessment	Class activity/continuous assessment	Case based assessment	Assignment	Symposium(presentation)	Poster	Herbarium	Project Report	Self-learning	Homework	OSCEs	Article review	Mid Semester	Practical				Final Exam
																						Exam	Attitude & Behavior	Manual	Attendance	
Fall Semester	PN701	PS	Pharmaceutical Organic Chemistry- I	2	0	2	10	10		15									25						40	
	MC701	BBS	Anatomy and Physiology- I	2	0	2	10	10				15							25						40	
	GE701	GE	Mathematics & Statistics	2	0	2	10			10							15		25						40	
	GE702	GE	Medical Terminology and Information Literacy	2	1	3						15	10			10			25						40	
	GE703	GE	Computer Application	0	2	2	10			10		15							25						40	
	GE704	GE	Islamic Study	2	0	2	10			10		15							25						40	
	PC701	GE /PS	Introduction & History of Pharmacy	2	0	2	10	10				15							25						40	
Spring Semester	PN702	PS	Pharmaceutical Organic Chemistry- II	2	1	3	10			15									20	15	3	4	3		30	
	CP701	CS	Social Behavior Aspects in Pharmacy	2	0	2	10	10								15			25						40	
	GE705	GE	Positive psychology	2	0	2	10	10					15						25						40	
	GE706	GE	Environmental Sustainability	2	0	2	10					10	15						25						40	
	PC702	PS	Pharmaceutics-1	3	1	4	10					15							20	15	3	4	3		30	
	MC703	BBS	Anatomy and Physiology-II	2	1	3	10					15							20	15	3	4	3		30	
Summer Semester	GE706	GE	Arabic Language Skills	2	0	2	10			10		15							25						40	
	GE708	GE	UAE Society	2	0	2	10			10		15							25						40	
	EC7011/E C7012	EC	Elective Area- I	2	0	2	10			10		15							25						40	
Fall Semester	CP702	CS	Pharmacology and Therapeutics-I	3	1	4	10				10	15							20	10	1	2	2		30	
	PN703	PS	Medicinal Chemistry-I	3	0	3	10			15		15							30						30	

	MC703	BBS	Biochemistry	2	0	2	10			10		15							25					40
	MC704	BBS	Microbiology and Immunology	3	1	4	10					15							20	15	3	4	3	30
	PC703	PS	Pharmaceutics- II	3	1	4	10					15							20	15	3	4	3	30
Spring Semester	PN704	PS	Medicinal Chemistry -II	2	1	3	10									15			20	15	5	5	-	30
	PC704	PS	Biopharmaceutics and Pharmacokinetic	3	0	3	5	5				15				15			30					30
	CP703	CS	Clinical Biochemistry	2	1	3	10									15			20	15	5	5	-	30
	CP704	CS	Pharmacology and Therapeutics-II	2	1	3	10									15			20	15	5	5	-	30
	CP705	CS	Pharmacy Practice	2	1	3	10						15						20	15	3	4	3	30
	MC705	BBS	Pathology	2	0	2	10	10				15							25					40
	IPPE-01	CS	Introductory Professional Practice Experience ( See catalog)	0	5	5																		
Fall Semester	PN705	PS	Medicinal Chemistry-III	3	0	3	10	10				15							25					40
	PC705	PS	Pharmaceutical Technology	2	1	3	10					15							20	15	3	4	3	30
	PC706	PS	Pharmaceutical Biotechnology	2	0	2	10	10				15							25					40
	CP706	CS	Pharmacology and Therapeutics-III	3	1	4	10				10	15							20	10	1	2	2	30
	CP707	CS	Applied Pharmacokinetics	2	0	2	10	10				15							25					40
	CP708	CS	Alternative and Complementary Medicines	2	0	2	10	10					15						25					40
	CP709	GE/CS	Research Methodology and Biostatistics	2	0	2													50					50
Spring Semester	PN706	PS	Instrumental analysis	2	1	3	10					15							20	15	5	5	-	30
	CP710	CS	Pharmaceutical Care	2	0	2	10	10				15							25					40
	CP711	CS	Pharmacology and Therapeutics-IV	2	1	3	10									15			20	15	5	5	-	30
	CP712	CS	Pharmacogenomics and Precision Medicine	3	0	3	10	10					15						25					40
	EC7021/E C7022	EC	Elective Area-II	2	0	2	10	10				15							25					40
	GE709	GE	Innovation and Entrepreneurship	2	0	2	10	10				15							25					40
Summer semester	IPPE-02	CS	Introductory Professional Practice Experience ( See catalog)	0	3	3																		
	INTR	PS	Industrial Training( See catalog)	1	0	1																		

Fall Semester	CP713	CS	Hospital Pharmacy	2	0	2	10			10						15					25					40
	CP714	CS	Pharmacy Laws and Drug Regulations	1	0	1							50													50
	CP715	CS	Pharmacoepidemiology & Pharmacovigilance	2	0	2	20						40													40
	CP716	CS	Clinical Toxicology	2	0	2	10	10					15								25					40
	CP717	CS	Pharmacology and Therapeutics- V	2	1	3	10										15				20	15	5	5	-	30
	CP718	CS	Natural Medicines Safety and Efficacy	3	1	4	10							15							20	15	3	4	3	30
	EC7031/E C7032	EC	Elective Area III	2	0	2	10	10					15								25					40
Spring Semester	CP719	CS	Pharmaceutical Administration and Pharmacoeconomics	2	0	2	10						15							25						40
	CP720	CS	Pharmacy Automation and Informatics	2	0	2	10					25								25						40
	CP721	CS	Professional Skills in Practice	1	2	3				10		20							30							40
	CP72	CS	Capstone Course	0	2	2	15	15	30				30			10										
	CP723	CS	Calculations in Practice	2	0	2	10					20								30						40
	CS707	CS/PS	Capstone Project	0	2	2		25					50			25										-
	EC7041/E C7042	EC	Elective Area IV	2	0	2	10						15							25						40
Fall Semester	APPE-02	CS	Advanced Professional Practice Experience (See catalog)	0	1 6	1 6																				

## 9.2.Seminar Rubrics

Student Presenter: \_\_\_\_\_

Grading Scale:

Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_

F	D+	C	C+	B	B+	A	A+	

Knowledge & content	1 (below 40)	2 (40-60)	3 (60-80)	4 (80-100)	Score
Organization and Presentation	Hard to follow; sequence of information jumpy	Most of information presented in sequence	Information presented in logical sequence; easy to follow	Information presented as interesting story in logical, easy to follow the sequence	
Background Content	Material not clearly related to topic background dominated seminar	Material sufficient for clear understanding but not clearly presented	Material sufficient for clear understanding AND effectively presented	Material sufficient for clear understanding AND exceptionally presented	
Contribution of Work	Significance not mentioned or just hinted	Significance mentioned	Significance explained	Significance exceptionally well explained	
Knowledge of Subject	Does not have a grasp of information; answered only rudimentary questions	At ease with information; answered most questions	At ease; answered all questions but failed to elaborate	Demonstrated full knowledge; answered all questions with elaboration	
<b>Presentation Skills</b>					
Graphics (use of PowerPoint)	Uses graphics that rarely support text and presentation	Uses graphics that relate to text and presentation	Uses graphics that explain text and presentation	Uses graphics that explain and reinforce text and presentation	
Mechanics	The presentation has more than 10 misspellings and/or grammatical errors	The presentation has no more than 5 misspellings and/or grammatical errors	Presentation has no more than 2 misspellings and/or grammatical errors	The presentation has no misspellings or grammatical errors	
Eye Contact	Reads most slides; no or just occasional eye Contact	Refers to slides to make points; occasional eye contact	Refers to slides to make points; eye contact majority of the time	Refers to slides to make points; engaged with the audience	
Elocution - not ability to speak English language	Mumbles and/or Incorrectly pronounces some terms	Incorrectly pronounces some terms	Incorrectly pronounces a few terms	Correct, precise pronunciation of all terms	
Intonation	Voice is low; challenging to hear	Voice fluctuates from low to clear; difficult to hear at times	Voice is clear with few fluctuations; the audience can hear well most of the time	Voice is clear and steady; the audience can hear well at all times	
Length and Pace	Short; less than 30 min	Short 40 min OR long >50	Adequate 40-45 min	Appropriate (45-50 min)	
	Rushed or dragging throughout	Rushed or dragging in parts	Seminar mostly well-paced	Well-paced throughout	

## 10. Teaching Activities (Pedagogy)

### 1. Integrative Methods

**Lecture** — An oral presentation, usually formal in nature, to a group by an individual highly knowledgeable about the subject.

**Brainstorming** — A process in which students are encouraged to participate by sharing their ideas or suggestions on a subject. No discussion of each point is allowed until important ideas have been expressed.

**Group Discussion** - A small group comprising of not more than 10 students with each faculty member to discuss on subject related topics.

**Office Visit** — A face-to-face exchange of information among two or more students, usually at the location of the information provider.

**Tutorial**- A period of instruction given by a College tutor to the student.

### 2. Reinforcement Methods

**Problem-based learning (PBL)** is a student-centred instructional strategy in which students collaboratively solve problems and reflect on their experiences. Student-focused problem-based learning is a self-directed process characterized by the active acquisition of knowledge and problem-solving skills by students that occurs from the process of reasoning towards the understanding or resolution of problems. It results in a usable knowledge database that has been actively acquired and is reinforced through repeated applications. Students are motivated by the internalized reward of discovery and develop a colleague based learning that will produce pharmacists who have learned to learn and have the ability to apply their knowledge base to the resolution of new and unique problems.

**E learning and Computer software's**- Use of electronic education technology and a set of instructions or program, that enables a computer to be used to provide educational information, to transmit communication or to aid in decision making.

**Self-Directed-Learning**- Since self-directed learning is believed to promote lifelong learning so students are motivated to take up self-learning exercises and are also encouraged to make presentations on allotted topics during the regular lecture schedules.

**Symposium** - An assembly in which a small number makes short presentations of speakers who are knowledgeable about a particular subject. These presentations may range from 20 to 30 minutes each.

**Group Discussion** - A small group comprising of not more than 10 students with each faculty member to discuss on subject related topics

**Panel Discussion**— A gathering at which a panel of individuals discuss a subject in front of students but interact with student members only when those members wish to ask a specific question or clarify a point under discussion. When a particular point is resolved, the organized discussion among panel members continues.

**News Letters** — A publication of six pages or fewer, focusing on a broader topic related to the subject that presents instructions, guidelines, or other specific information.

**Scientific Poster** — A large, printed sheet intended for display and containing words, illustrations, or both to provide general or specific information for broad or targeted students.

**Leaflet or flier** — Brief, concise printed information focused on a specific program, objective, current event, or other activity and designed to create or enhance awareness.

**Pamphlet or booklet** — A printed publication that provides more comprehensive information on a subject than a fact sheet, leaflet, or flier

**Journal club** — A means of presenting scientific, theoretical, or philosophical information in a professional journal or in a periodical that focuses on a specific discipline, commodity, student, or subject matter.

### 3. Practical Methods

**Method demonstration:** An explanation of how to implement a practice or accomplish a task by showing a practical application or guiding the learner in carrying out the task.

**Result demonstration:** A presentation that shows the effects of a practice change or task by means of practical application, using visual, experiential, or oral methods; it usually involves a before-and-after comparison.

**Field trip:** A planned activity of one-day duration in an outdoor setting for demonstrations; observation of programs, practices, activities, or objects; presentations; or practical experiences.

**Workshop:** A meeting in which a small group of people with common interests meet to study or research a specific topic or to practice a specific skill to enhance their individual knowledge and proficiency.

**Role play:** An exercise in which selected members of a group are assigned to play specific roles in a hypothetical or simulated situation followed by discussion among all group members.

**Case study:** A specific and detailed description of an event, situation, or circumstance that is presented to a student for study and analysis.

**Practical Exercise: Statistical Analysis of Data or results** — Evaluation, use, or presentation of new or existing data to explain or predict the impact of practice, innovation, input change, or changing conditions and circumstances

**Professional Practice Experience-(PPE):** Professional Practice Experience (PPE) is the experience gained during the training period in community pharmacies, healthcare setting, hospitals and pharmaceutical industries.

#### Capstone Project:

A project submitted by the students in the fourth year of B. Pharm., based on all round knowledge they have acquired in the four main areas viz., Pharmaceutics, Pharmaceutical Medicinal Chemistry, Natural Products, Pharmacology, Therapeutics and Clinical Pharmacy. This project includes a research work, which the students carry out on recent developments in pharmaceutical sciences.



### **Facilities for Teaching**

Dubai Pharmacy College for Girls has excellent teaching facilities for students. It has four lecture rooms which are equipped with a video projector, computerized digital whiteboard, smart-board a Lap-top, on-line computer and audio-visual facilities. For quizzes and assessment of the student, learning clickers are used in classrooms. DPCG established a virtual learning environment (VLE) available through the Desire2Learn platform, namely Learning Management System (LMS). Most of the exams are conducting online using respondus lockdown browser in Learning Management System (LMS) and Zoom monitoring. The students also use the LMS for the submission of the assignments or any other activities and they can check for the plagiarism for their reports by using Turnitin in LMS. The faculties and the students are trained to use the LMS efficiently. Lecture notes are posted on LMS in PowerPoint or Microsoft Word or PDF formats at least 24 hours in advance, so the students are expected to read over the lecture material prior to coming to class. The students have access to the LMS through user name and password so that they can communicate with the instructor at any time. Besides these, the College also provides printed hand-outs or notes for the offered courses before the beginning of the next semester so that the students when they join the College should come well prepared in advance.

## **11. Progress Policy Guidelines**

### **Satisfactory Progress**

A student must maintain a semester GPA of 2.00 to be considered making satisfactory progress.

### **Probation**

Students who fail to achieve a semester GPA of 2.00 shall be placed on probation for one semester. If the student achieves a semester GPA of 2.00 or better during the probationary semester she makes satisfactory progress but has not achieved the required semester GPA of 2.00, the student may continue on probation for one additional semester and will be allowed to appear in the supplementary exams held in September each year for both semesters.

### **Unsatisfactory Progress**

If the student on probation fails to achieve a semester GPA of 2.00 at the end of the first probationary semester, the student will be reported to the Dean as making unsatisfactory progress. The student will be permitted to remain on probation for one additional semester.

A student who fails to achieve a semester GPA of 2.00 at the end of the second consecutive probationary semester shall be reported by the Examination and Evaluation Unit to the Dean's Office as making unsatisfactory progress.

**Note:** If a student fails to obtain the GPA 2.0 (70%) then she should repeat the course(s) in which unsatisfactory grades (D/D+) are got. In case, failing to improve the grades even after repeating the course(s) those students will be dismissed from the College.

## 12. Policy for Completion of Undergraduate

A student will be awarded a Bachelor of Pharmacy (B.Pharm) degree subject to fulfilling the following requirements:

- **Completion of all courses, Professional Practice Experience and Students Graduation Project**  
Students enrolled in this program are exposed to a core professional curriculum that includes the basic biomedical sciences; pharmaceutical sciences; and clinical sciences in addition to general education and elective courses. The curriculum, which is offered through 160 credit hours (CH), is organized to include 104 CH core requirement courses, 8 CH elective courses and 21 CH general education courses, 24 CH of Professional Practice Experience, 1 CH Industrial training and 2 CH Capstone Project.
- **Maintain a CGPA of at least 2.0 on a 4.0 scale.**
- **Minimum and maximum periods of enrolment for the completion**  
The minimum duration required for completion of the BPharm program is 4.5 years, and the maximum period should not exceed 6 years.

## 13. 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 for Girls, the rights are:

1. Obtain pharmacy education according to a well-established educational program and in a suitable educational environment.
2. Attend theory and practical classes regularly and to participate in scientific discussions held in the class as directed by the faculty.
3. Participate in all students activities sponsored by the Student Union.
4. Benefit from facilities offered by the College such as a library, hostel, transportation and others.
5. 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. Appear in all examinations and evaluations conducted according to the regulations of the College.
7. 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. Get social care services offered by the College.
9. 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. 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 behaviour and discipline in the College
- e. A graduation certificate after she fulfils 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 of charge. 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. Do her best to achieve the goals set by the College, as mentioned in the regulations of the College.
2. Do her best to achieve a 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. Follow all the rules and regulations of the College for academic and scientific activities.
4. 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. Handle all the properties of the College like instruments, equipment etc., carefully.
6. Be cooperative in adopting all the College principles, especially the following:
  - (a) To wear Islamic *Hijab*
  - (b) To be punctual in offering prayers
  - (c) To maintain a good relations with her colleagues
7. Inform the College administration or the Dean about misbehaviour or any mistakes committed by any student, which may give a bad reputation to the College.
8. Pay the fees regularly as required by the College.
9. All the students must follow the rules relating to attendance, and any non-compliance will lead to consequences mentioned in the attendance policy mentioned in the Student Handbook.
10. **Regulation of Student Behavior:** The guidelines and procedures for roles and responsibilities of students documented in DPCG Policies and Procedure Manual E. Students will be applicable for distance learning. As an additional guideline specifically for distance learning, DPCG will follow **Student Behavior Management Distance Learning 2020** as provided by the Ministry of Education, UAE. This shall be communicated with students, faculty and staff.

## 14. Student Appeals Policy

Every student has the 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 BPharm program after being dropped from the program for academic reasons and dissatisfied course grades.

## 15. 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.

## **16.Education Support Facilities**

Dubai Pharmacy College for Girls (DPCG) provides all educational support facilities to its students. The students get the best scientific training and knowledge which will make them eligible as pharmacists to boost the vast scientific and industrial development of U.A.E.

#### **COLLEGE BUILDING**

The College building, on the ground floor, has 2 laboratories, administrative and faculty offices, a meeting room, examination control room and a reception section. On the first floor, are housed one laboratory, four lecture rooms, student's affair office, student advisory office, students' common room, students printing office and chemical and glassware store. In addition, the DPCG extension including 2 laboratories, a model pharmacy with a drug information center, LMS examination Hall equipped by computer, main examination hall, animal house and the main library. 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 practicals in Pharmaceutics-I & II and Pharmaceutical technology courses.

#### **LABORATORY AND INSTRUMENTATION FACILITIES**

DPCG possesses well-equipped laboratories for each discipline. There are five 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	<b>Dubai Medical College</b>
<b>DPC Extension</b>	Microbiology Laboratory
Pharmaceutical Chemistry Laboratory	Anatomy Laboratory
Pharmacology Laboratory	Biochemistry Laboratory
Pharmacy Practice Laboratory	Pathology Laboratory
Advance Research Laboratory	Physiology Laboratory

## 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.

## STUDY ROOMS

DPCG provides study room facilities for its students, which may be utilized by them in their break hours and also by hostel students after the class hours. These study rooms are located in DMCG and are well furnished with all the required facilities. The students have easy access to these study rooms and are free to use all facilities present there like computers with Internet and Journals.

## LIBRARY

The Library in DPCG offers an excellent environment for study. It is available to students at various stages of the study. The library working hours are arranged as far as possible to meet students' need. The library has subscribed e-Journals in various areas of Pharmacy and Medical Sciences. The physical facilities in the library are adequate space given for housing the collection of books, journals, and audiovisuals. There is also a large reading room to facilitate learning. Students have access to computer terminals to search on-line catalogues, databases, and other information systems. The library is also equipped with photocopying machines, study rooms that allow the students to study individually or in group.

### Opening hours:

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

## COMPUTER LABORATORY

The Computer Laboratory is helpful in the teaching of English language, computer science, pharmacy practice, pharmaceutical care, therapeutics and clinical pharmacy courses. The Computer Laboratory, well equipped with computers, have Internet connections along with auditory systems. Besides this Computer Laboratory, the College enjoys full technical guidance, support and know-how from the Information Technology (IT) department, which is its sister organization and is adjacent to DPCG campus.

The mission of the I.T. department is to provide computer support, awareness and training services throughout the year to faculty, administrative staff and students. It also has a laboratory which is well equipped and is freely available for use. It is monitored by well-qualified staff to render help and assistance.

## ACCOMMODATION FACILITIES

DPCG provides hostel facility for students who apply for it. It is close to the College and 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 Medical Centre (DMC) and Dubai Medical University Hospital. DMC doctors do periodical checkup for all the students. Those found ill are taken care of by them. In severe cases, the hostel authorities send the resident students to Dubai Government hospitals.

### **STUDENT COUNSELING SERVICES**

Students who 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.

### **DINING SERVICES**

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.

## **17. Students' Support Services**

### **STUDENT UNION**

There is a "Students' Union" consisting of members from the student community elected from all years of BPharm. 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 the study. The Student Union also helps to maintain close links between the College administration, faculty, and the students which are essential for the efficient functioning of the College.

### **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 and 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 the credit hour system and its requirements for graduation to obtain a 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 a specific mission but one common goal: to provide academic advising, outreach and support.

### **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.

### **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 the different skills necessary to start a career in various Pharmaceutical settings.

Career Guidance sessions at DPCG are provided to the 4th year BPharm students on individual and/group 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.

## **18. Glossary of Terms**

### **Unit System**

DPCG uses the course unit system which is based on the required number of hours of instruction to be successfully completed according to the standards set by the College to obtain University degree i.e. Bachelor of Pharmacy.

### **Credit Hour**

Credit hour refers to one lecture hour per week lasting for minimum 15 weeks.  
Each lecture hour is equivalent to two hours of practical study per week.

### **Course**

Each course is a program of study presented in lectures and practical with a fixed number of credit hours taught in one semester mentioned in the curriculum.

### **Curriculum**



The curriculum is a total description for the BPharm. program and explains the following:

- Detailed syllabus of integrated courses that fulfill the requirements for BPharm. Degree.
- Professional Practice Experience as required for BPharm. Degree.

### 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, e.g. Pharmaceutical Organic Chemistry I is made a pre-requisite for Pharmaceutical Organic Chemistry-II.

### Study load

Study load in DPCG means the number of credit hours a student is registered for and has to attend weekly classes. In DPCG in spite of introducing credit hours system, the load is according to the time table fixed for each class. The only provision given to the student will be the minimum credit hours out of the total that they have to successfully complete each semester in order to be promoted to the next semester.

### Course Types

- An **elective** is a course chosen by a student listed from different areas available during the study period.
- General education** is a course offering within the following areas such as Islamic studies, English, Mathematics, etc.
- A **core requirement** course is a course within a major, which is essential and must be satisfactorily completed to fulfil the requirements of the specific departments.
- Professional Practice Experience** provides an opportunity for a student to have work experiences in community, industry and hospital pharmacies and must be satisfactorily completed to fulfill the requirements of the program.
- Capstone Project:** A project submitted by the students in the fourth year of B. Pharm., based on all round knowledge they have acquired in the four main areas. This project includes a research work, which the students carry out on recent developments in pharmaceutical sciences.





# **Appendix A:**

## **Professional Practice Experience**

## Internship

### Purpose

The aim of this procedure is to make sure that the students of DPCG get adequate experience in various pharmacy practice settings such as Community Pharmacies, health care setting, Pharmaceutical Industries and Hospitals, in order to achieve the mission of the College. Professional Practice Experience (PPE) in pharmacy education is rapidly gaining recognition as it enriches undergraduate curriculum and bridges theory to application.

### Scope of Application

This procedure applies to all the DPCG students, Student's Professional Practice Experience Unit, comprising of a Head, Members, Administrative Staff and the Staff in Community, Pharmaceutical Industry, and various hospitals responsible for the implementation of this procedure.

### Definitions

**IPPE01:** Introductory Professional Practice Experience for 200 hours during summer Semester in second year of B. Pharm.

**IPPE02:** Introductory Professional Practice Experience and healthcare setting for 120 hours during summer Semester in Third year of B. Pharm.

**APPE:** Advanced Professional Practice Experience in Hospitals for 640 hours during Fall Semester of Fifth year of B. Pharm.

**INTE:** Industrial Training: for 40 hours during hours during summer Semester in Third year of B. Pharm.

**Logbooks:** The College supplies it to the students, which is an instructional manual with queries regarding Professional Practice Experience in different pharmacy practice settings.

### Responsibility for Application

Head, Student's Professional Practice Experience Unit.

### Process

As the pharmacy profession has moved from the traditional product to patient orientation, curricula within the schools and Colleges of pharmacy have evolved to introduce more experiential course work to foster this patient orientation. This change has been supported by the philosophy of pharmaceutical care that encourages pharmacists to assume a patient advocacy role in optimizing a patient's drug therapy while minimizing the adverse effects of the medication. The role of experiential education is to hasten and enhance the development of the student's ability to provide pharmaceutical care.

Professional Practice Experience, being an integral part of DPCG education program, has been given more emphasis to improve its implementation in the present curriculum and the number of hours has been rescheduled to 1050 to be distributed as follows:

I. Introductory Professional Practice Experience (IPPE 01) in <b>Community Pharmacy</b> for not less than <b>200 hrs.</b>
II. Introductory Professional Practice Experience (IPPE 02) in <b>Healthcare setting</b> for not less than <b>120 hrs.</b>
III. Industrial Training (INTR) in <b>the Pharmaceutical Industry</b> for <b>not less than 40 hrs</b>
IV. Advanced Professional <b>Practice Experience</b> (APPE ) in <b>Hospitals</b> for <b>not less than 640 hrs</b>

### **Introductory Professional Practice Experience Test (PPET)**

During IPPE01 training, students will be evaluated weekly based upon daily activities by a pharmacist. Students will assign 4 assignment and will be evaluated by the DPCG preceptor and pharmacist. After completing 100 hours, the student will be evaluated orally in the pharmacy by DPCG preceptor (onsite evaluation). After completion of 200 hours of training; students will be evaluated as well with structured evaluation checklists and oral examinations.. It will be helpful to assess their knowledge and training outcomes considering accomplishing the training goals' output.

### **Evaluation of PPE**

At the end of each of IPPE001, IPPE02, and APPE the students must answer a questionnaire. The college Supervisor will collect these questionnaires and co-ordinate the results. The results of this study will be discussed in the College Academic Council Meeting and the Advisory Committee for any improvements in Professional Practice in Community, Hospitals and Pharmaceutical Industry if considered necessary.

### **Logbooks**

- Each student will be provided with a Logbook at the start of each IPPE.
- The main objective of the Logbook is to achieve the goals of IPPE.
- Logbook is a manual designed by Dubai Pharmacy College, which is to be filled by the student during Professional Practice.
- Every Student should have her own "Log Book" to write down daily activities during the IPPE.
- College Supervisor will provide the student with the procedure for filling the Logbook.
- The student should submit the Logbook to the College supervisor at the end of her Professional Practice.

**Student's Responsibility:** The student must be informed before each IPPE about her responsibilities which are as follows:

1. She must exhibit a professional appearance in manner and dress and adhere at all times to the standards of dress behaviour.
2. She must wear her name badge at all time during IPPE.
3. She must regard all information and activities relating to the pharmacy, the medical community and customers to be confidential and, under no circumstances will such knowledge be revealed to anyone.
4. She must keep in mind that the primary aim of PPE is learning. Learning is not a passive process but requires a continuous, active commitment.
5. She should recognize that the best learning environment is one that fosters mutual respect and courtesy between the trainee and preceptor.
6. She should never question the preceptor's advice or directions in public, personnel, but rather accept it as a means of learning.
7. She should never be hesitant to admit that something is unknown to her and seek help whenever needed.
8. She should be aware of all laws and rules which govern her practice and should seek clarification of any points which are not clear.
9. If she is regularly asked to violate laws or has knowledge that the pharmacy where she is employed violates such laws, she should immediately report and ask for a change of IPPE site or the preceptor. She shall report within five days after the end of each PPE to IPPE Coordinator.

### **I) Introductory Professional Practice Experience (IPPE 01)**

It is taken by the students in one or more Community Pharmacies selected by IPPE coordinator during the summer semester at the second year of B. Pharm. under course heading IPPE01. The duration of training is 200 hours.

Introductory practice experiences are intended to introduce the student to pharmaceutical care. Service learning and shadowing are two types of experiences that accomplish this goal.

Service-learning allows students to participate in service projects that meet the community's needs, foster a sense of caring for others, and lead to student learning through communication and professionalism. Therefore, there are reciprocal benefits for both the community and pharmacy students. The development of caring relationships during service-learning prepares students for establishing conventional patient caring relationships.

Shadowing, another type of introductory practice experience, involves observing practitioners conducting pharmaceutical services in the community pharmacy.

Regular visits, at least once, will be done by the faculty member of DPCG to monitor the students training progress as per the predefined learning objectives and have discussions with preceptors and students. The monitoring can also be done by contacting the student's preceptors via phone, fax and email.

#### **Learning Outcomes**

On completion of the Introductory Professional Practice Experience in one or more Community Pharmacies, the students will be able to:

- LO 1.** Identify main pharmacy locations and distribution of medicines in community pharmacy.
- LO 2.** Distinguish the prescription and non-prescription medications and pharmaceutical products available in the market
- LO 3.** Recognize the minor to moderate medical cases that can be managed by the pharmacist
- LO 4.** Recognize the standard information required in a prescription
- LO 5.** Review the prescription for proper product selection, proper dose, proper frequency, proper duration, drug interaction, drug-disease interaction to ensure effective, safe and economical patient care
- LO 6.** Apply calculations required for compounding, dispensing and administering medications with proper conversions between metric, and apothecary system of weights and measures
- LO 7.** Practice proper prescription checking, pricing, preparing, and labelling
- LO 8.** Apply, modify or recommend modifications in prescriptions to ensure effective, safe and economical patient care.
- LO 9.** Resolve prescription problems
- LO 10.** Record prescription using files and / or computer.
- LO 11.** Identify policy to inventory control (including the purchase of medicines, expired medications and return of patients to suppliers)
- LO 12.** Recognise good storage practice in Community pharmacy.
- LO 13.** Apply IT skills for gaining professional information and literature
- LO 14.** Communicate with Health professionals for effective resolution of drug-related problems.
- LO 15.** Communicate with preceptors for reviewing cases, diseases or drugs
- LO 16.** Operate the professional experience in patient counseling and monitoring.

**LO 17.** Communicate with patients for taking patient history, selecting, recommending self-therapy or OTC drugs.

**LO 18.** Develop the concepts for the rational use of different pharmaceutical dosage forms.

### Supervision of IPPE01

Introductory IPPE is carried out under the College supervisor's supervision (Member of Student Professional Practice Experience Unit) and a preceptor at the IPPE site who plays a positive role model for students who possess the following characteristics.

### Preceptor's characteristics

The Preceptor or the Pharmacist should:

1. Have a minimum of one year of professional experience.
2. Be involved in professional organizations.
3. Be competent in the area of practice.
4. Take personal responsibility for patient outcomes.
5. Utilize clinical and scientific knowledge in clinical care decision – making.
6. Demonstrate the ability to have the latest scientific knowledge in the Pharmaceutical field.
7. Demonstrate a desire and an aptitude for teaching.
8. Demonstrate the ability to assess and document student performance.
9. Practice continuous professional development and collaborate with other healthcare professionals as a member of a team.
10. Demonstrate a commitment to his/ her organization, professional society and community.

### Role of Preceptor

- ✓ To be a learning resource for the pharmacy student who receives the necessary training to develop skills and competencies as a community pharmacist.
- ✓ To guide the pharmacy student throughout **five weeks of training**.
- ✓ To be a role model as a professional pharmacist to the pharmacy student.
- ✓ To provide professional services and constructive feedback during the training.
- ✓ To assess pharmacy student performances during the training period.

### Steps for Introductory IPPE 01

1. PPE coordinator asks all students to suggest at least two community pharmacies of their choice with the pharmacists' name and qualification working in these pharmacies.
2. The coordinator collects all the students before IPPE and gives them the Log Book.
3. PPE coordinator explains the objectives of IPPE01 and student's responsibility during IPPE and also provide information to each student about the selected preceptor.
4. Each student receives a letter signed by IPPE01 coordinator and the Dean for the preceptor, which has the starting date and completion date of PPE.
5. After completing IPPE01 the Coordinator receives Preceptor's reports and Evaluation sheets and sends them to the Evaluation and Examination Unit.

Assessment/Assessed by	Marks (%)	Marks
Record of weekly activities (Weekly Diary Record) /DPCG preceptor	10%	/10
Assignments/ DPCG preceptor	40%	/40
Onsite Training Evaluation (DPCG Preceptor)	10%	/10
Pharmacist's assessment / Field preceptor	30%	/30

DPCG preceptor's assessment	10%	/10
<b>Total</b>	<b>100%</b>	<b>/100</b>

## II) Industrial Training (INTR)

**It is taken by the students during the summer semester of B. Pharm. 3<sup>rd</sup> year in Drug manufacturing industries of U.A.E., which should meet the following requirements:**

1. Should apply GMP.
2. Should have a manufacturing capacity of all types of pharmaceutical products, a well-developed R & D. section, a good Quality Control department and well-arranged storage facilities.
3. Should have a licensed MOH Pharmacist in Production and Quality Control department.
4. Should be functional and operative.

**Learning objectives of the Industrial Professional Practice Experience are:**

- LO 1.** Identify the design and set up of a Pharmaceutical Industry
- LO 2.** Identify the design and set up of a Pharmaceutical Industry.
- LO 3.** Identify the basics in Good Manufacturing Practice.
- LO 4.** Organize purchase and analysis of the raw materials used in the manufacturing of different pharmaceutical products.
- LO 5.** Show experience in various Production Units involved in the manufacturing of solid, liquid, semisolid, and sterile dosage forms, etc.
- LO 6.** Identify the packaging and storage of manufactured pharmaceutical products.
- LO 7.** Show knowledge about quality control, quality assurance and validation of manufactured pharmaceutical products.
- LO 8.** Show experience of working in quality control laboratories having sophisticated instruments like HPLC, GC, and Mass Spectrophotometer etc.
- LO 9.** LO8: Describe the product and development work going on in R & D labs of the Industry.

### Supervisors for Industrial Training

Professional Practice in the Pharmaceutical Industry is monitored under the supervision of:

1. College Supervisor: one of the members of Students Professional Practice Experience Unit.
2. Industry Supervisor: in the drug manufacturing industry.

### Responsibilities of Industrial PPE Supervisors

#### a. College Supervisor

1. To prepare a list of students eligible for Professional Practice.
2. To send the list of students to the Industry Supervisor.
3. To co-ordinate with the Industry Supervisor for:
  - Student's transportation from College and hostels to Industry and back.
  - Monitoring the Professional Practice program.
  - Solving any problem hindering proper Professional Practice.
4. To prepare a monthly report about Professional Practice of students for review by the College Academic Council.
5. To evaluate students PPE depending on professional reports supplied by them.

#### b. Industry Supervisor:

1. To receive a list of students sponsored for Professional Practice.
2. Send a list of enrolled students to the College Supervisor.

3. To prepare a Professional Practice program meeting the following requirements,
  - a. To identify the Units in the Industry where Professional Practice will take place as per the prescribed schedule.
  - b. To identify the person responsible for marking the attendance of students during Professional Practice.
  - c. To determine the mode of Professional Practice and appoint the person responsible for monitoring the program.
  - d. Fulfillment of 50 hours Professional Practice in the Industry.
  - e. To give each student a copy of the Professional Practice program.
4. To submit a report to the College Supervisor about the students' attendance.
5. To submit a report on students assessment to the College Supervisor at the end of Professional Practice in the Pharmaceutical Industry.

#### **Evaluation of students receiving Industrial Training.**

**Total marks for evaluation of Industrial Training are 50, which are distributed as:**

<b>S. No.</b>	<b>Particulars</b>	<b>Marks Allotted</b>
1.	Experience of stores for raw materials and finished products	05
2.	Production for solid, semi-solid, liquid and sterile dosage form.	05
3.	Quality control and Quality assurance	05
5.	Attendance	05
6.	Professional report supplied about student	10
7.	Written test	20
<b>Total</b>		<b>50</b>

### **III) Introductory Professional Practice Experience-Health care setting (IPPE-02)**

**It is taken by the students in the summer semester of 3<sup>rd</sup> B.Pharm under the course heading IPPE02. Hospital training is taken in a healthcare setting. The IPPE02 Coordinator selects the healthcare setting, and it should meet the following requirements:**

- a. Ministry of Health, U.A.E. or Dubai should have approved the hospital.
- b. All activities related to patients must be computerized.

#### **Learning Outcomes of Introductory Professional Practice Experience (IPPE02)**

- LO 1.** Provide students practical experience in the operation and drug distribution systems of various pharmacy practice environments;
- LO 2.** Introduce students to the application of scientific knowledge in the daily practice of pharmacy;
- LO 3.** Demonstrates problem-solving skills regarding difficult medication therapy problems and pharmacy issues in area of expertise;
- LO 4.** Understands integrated health system and pharmacy work flow in different areas and integrates team practice purposes;
- LO 5.** The student will be able to discuss the role of pharmacists within the hospital settings, in drug regulatory departments and in rehabilitation centers;
- LO 6.** Students will able to provide basic drug information in terms of appropriate drug usage, administration, dosage, side effects, storage, and drug-drug and drug-food interactions.

### Criteria of a Field Preceptor

The field preceptor should be not less than 2 years of experience as a registered practising/administrative pharmacist in UAE.

### Responsibilities of field Supervisors

- ✓ To be a learning resource for the pharmacy student who receives the necessary training to develop skills and competencies as pharmacist.
- ✓ To guide the pharmacy student throughout the respective areas of training.
- ✓ To be a role model as a professional pharmacist to the pharmacy student.
- ✓ To provide professional services and constructive feedback during the training.
- ✓ To assess pharmacy student performances during the training period.

### Preceptors' assessment and evaluation

**Assessment:** The pharmacist will assess the students' performance during the training at the chosen healthcare setting sites and DPCG preceptor (academic staff of the DPCG). The assessment will be based on a weekly reflective diary, the pharmacist and the DPCG preceptor write student reports and assessment.

Assessment/Assessed by	Marks (%)	Marks
Record of weekly activities (Weekly Diary Record) / DPCG preceptor	30%	/30
Onsite Training Evaluation (DPCG Preceptor) oral	20%	/20
Pharmacist's an assessment / Field preceptor	30%	/30
Assignment	20%	/20
<b>Total</b>	<b>100%</b>	<b>/100</b>

### Post-placement evaluation and assessment

The field preceptor should fill up post- placement evaluation and assessment once the students completed the attachment.

**The Assessment by Activities, Overall Student's Performance** Assessment and Post Placement Evaluation - Preceptor should be sent directly to us by any of the methods below:-

- a) Scan and Email : dr.ammar@dpc.edu OR amarali20142015@gmail.com
- b) Mobile: +971555163220 . Attn to: Dr. Ammar Ali Saleh Jaber
- c) Postage mail to :  
Dr Ammar Ali Saleh Jaber  
Dubai Pharmacy College for Girls

### IV) Advance Professional Practice Experience in Hospitals (APPE)

It is taken by students in the fall semester of B.Pharm (9th semester). Under course heading APPE. Students will spend 8 weeks in Clinical setting (patient wards) and 8 weeks in Clinics-based rotation during a hospital pharmacy clerkship. Clinical setting rotation areas include internal medicine and intensive care unit. Moreover, clinics-based rotation areas include ambulatory care/primary health care and, Inpatient/outpatient rotation, as shown in the table below:



Clerkship		Duration (Weeks)	Credit Hours
Rotation 1 AP01-IM	Internal Medicine	4	4
Rotation 2 AP02-ICU	Intensive Care Unit	4	4
Rotation 3 AP03-AC	Ambulatory Care and Primary Health care	4	4
Rotation 4 AP04-IP	Inpatient/outpatient rotation	4	4
<b>Credit Hours (Total)</b>			<b>16 (640 hours)</b>

### General Goals and Objectives

- To develop a sufficient, relevant, and experiential knowledge base to utilize appropriate resources necessary to provide direct patient care regarding individualized Therapeutic planning, intervention and evaluation.
- To master the clinical skills necessary to assume accountability and responsibility for therapeutic outcomes in providing pharmaceutical care.
- To develop professional and interpersonal skills as a team of health care providers necessary for the provision of optimal patient care and pharmacy services.

### Student's Responsibility

- The student should exhibit a professional appearance both in manner and dress and adhere to the attachment site's dress and behaviour standards. The student should be well-groomed and dressed in professional attire, laboratory jacket/coat, an identification badge/name tag; students should dress decently as per the Emirati standards.
- Hospital pharmacy policies and procedures are specific to each Institution. The student must abide by these policies and procedures at all time.
- Any information about a hospital and/or a hospital pharmacy's operation must be considered confidential and is not to be discussed with other students or with anyone other than the instructors and the faculty members in charge of the educational program.
- Any information about a patient's illness or medication is confidential and is not to be discussed with anyone other than the instructor, other pharmacists on duty, and when in the patient's best interest, with health professionals providing care to that patient.
- The student must perform assignments and be involved in activities related to the functions of the particular units. It may be necessary at times to devote more than scheduled time while participating in these activities.
- The student must commit to an active learning process. Learning, especially in the attachment setting, requires initiatives, enthusiasm, and active participation on behalf of the student.
- The student should never hesitate to admit a lack of knowledge in an area and seek appropriate individuals' assistance.
- The student should never question the instructor's advice or directions in public, in front of the other students or staff members. Disagreements must be discussed in private.
- Comments and criticism of the student by the instructor should be viewed as a means of learning and not as a personal embarrassment.
- The students should not perform dispensing functions, make professional decisions, or communicate with patients and/or health professional without instructions from the preceptor.
- Attendance at the hospital during the institutional attachment is mandatory. The student must notify in advance to the Training in charge at the hospital if tardiness or an absence is anticipated.

The student having unexcused absences will be subject to appropriate action by the Dubai Pharmacy College.

- The students must summarize each rotation area's working procedures, the role of the pharmacist in each area, and suggestion for improvement to achieve optimal patient care.

### **Duties And Responsibilities**

- This is primarily aimed to guide the respective preceptors and students on their role and responsibilities. This is crucial since the success of the attachment depends on the implementation, and this is vital in ensuring all of the above objectives are achieved..

### **Responsibilities of the preceptor**

- The preceptor should attempt to instill the principles of professional ethics by deeds as well as word.
- The preceptor should always explain, in detail, what is expected of student, in way of performance, appearance, attitude, and method of practice.
- The preceptor must insist on communication with the student at all time and be willing to discuss any aspect of practice that does not violate responsibility to his patients, the employer, or professional ethics.
- The preceptor should be aware, at all times, that his/her role is that of a teacher.
- The preceptor should afford the student the mutual respect and patience needed for the optimal learning experience.
- The preceptor should not assume a student's competency but determine it by reviewing his/her work profile through discussion and experience.
- Criticism should be constructive and empathetic and conveyed to the student either privately, or in an appropriate manner.
- The preceptor should strive to stimulate the student's interest in all aspects of the practice.
- The preceptor should be respectful, at all times, of fellow practitioners and members of the allied health professions.
- The preceptor should familiarize him/herself with the material contained in the Manual for the clerkship Experience rotations.
- Preceptors should review the student's progress periodically and share the results with the student. Preceptors should be especially certain to inform students of weaknesses as early as possible.

### **Prerequisites for all rotations**

- Successful completion of all required core curriculum courses in professional years. This means that a student must complete all required pharmacy courses before beginning the clerkship rotations.

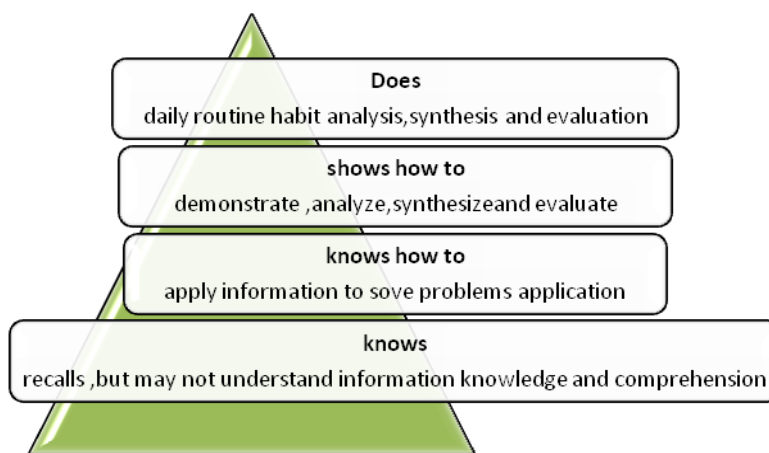
### **Placement:**

1. Duration of stay at each of the above units/services is arranged depending on the magnitude of the activities and the emphasis of the students' exposure. It may vary differently from each hospital according to the needs and facilities of the concerned hospital.
2. Students are to abide by the predetermined rotational schedule unless otherwise instructed by the preceptor/lecturer.
3. Students are required to get a signature from the respective preceptor of the units/services where they were placed immediately after completion of their placement.

### Evaluation of student's performance:

Preceptor from Dubai Pharmacy College For girls (DPCG) will be guiding the students throughout their training. The weekly visit will be done by the faculty member of DPCG to monitor the students training and have discussions with preceptors and students separately. During rotation, the preceptor will assess the student's performance and provide feedback about the strengths and areas for improvement. The preceptors will make these assessments using evaluation forms and performance criteria that are based on goals and objectives outlined in the rotation syllabus or manual. Therefore, before the rotation begins, the preceptor and the student should meet and review the rotation goals and objectives, students' performance expectations and criteria to measure performance.

The rotation goals and objectives are statements that communicate the students' level of performance and activity, which are expected from them to demonstrate. Typically, rotation goals and objectives communicate that the students are expected to provide patient care successfully in the clinical setting.



This figure describes four levels of ability that a student must achieve to provide patient care. The lowest level of this triangle is "knows" this tier infers that a student can recall knowledge gained during classroom courses and the rotations. Goals and objectives describing this level will be a statement such as "The student can describe symptoms, pathophysiology, laboratory tests, physical examination, prognosis and diagnosis of acute and chronic diseases. The other verbs that could be used in this statement to describe how to use the knowledge gained during classrooms.

### Evaluation of students receiving APPE

Total marks for evaluation of APPE are 200, which are distributed as:

S. No.	Particulars	Marks Allotted
1.	Internal Medicine	45
2.	Intensive Care Unit	45
3.	Ambulatory Care and Primary Health care	45
4.	Inpatient/outpatient rotation	45
7.	Attitude	10
8.	Attendance	10
	<b>Total</b>	<b>200</b>

**Records**

Relevant records such as logbook, etc.... will be checked by the head of Students' Professional Practice Experience Unit

**Filling**

With the help of the members of the Students' Professional Practice Experience Unit, it will be filled in the concerned files.



## **Appendix B: Capstone Project**

## Introduction

The students in the fourth year of B. Pharm. submit a research paper of the graduation project based on all-round knowledge they have acquired in the four main areas viz. Clinical Pharmacy and Pharmacy Practice, Pharmaceutics, Pharmacology and Toxicology, and Pharmaceutical Chemistry and Natural Products. This project includes a research work, which the students carry out in a group of 4-6. Students may submit their preference to the Head of Faculty Development and Research Unit by the end of the sixth semester. They have a choice of choosing bench research from subjects like Natural Products, pharmaceutical chemistry, pharmacology, and pharmaceutics; or can do a survey based on data collected from hospitals, a community in subjects related to clinical pharmacy; or can write a review article.

**Prerequisites:** Successfully completed all the courses of first, second and third years.

### Learning Outcomes:

**On successful completion of the capstone project, students should be able to:**

- LO1** Integrate information from multiple sources and analyze the literature in fields of inquiry.
- LO2** Apply fundamental and disciplinary concepts and methods in ways appropriate to their principal areas of study, with the ability to solve problems through critical investigation and gain the confidence in workplace and lifelong learning.
- LO3** Design, plan, and carry out a research project independently and as a team; includes creating a research question, preparing hypotheses, collecting data and presenting their work.
- LO4** Predict conclusions from the research findings and organize/report research findings in the form of a project.

### Role of Advisor:

The student's research Advisor holds the primary responsibility for providing the appropriate guidance and counsel essential to the scholarly development of the student. Based on the research interest and mutual consent of both students and advisor as well as any updated regulations decided by DPCG administration, each group of student is allocated to specific research supervisor at the end of the sixth semester. The advisor shall supervise the students' graduation project work and paper preparation and will chair the examining committee for the students' defence of their project and write up.

### 1) Completion of the Capstone Project

Completion of the Capstone project involves a number of steps, which are as follows:

#### a) Selection and registration of topics for B. Pharm Capstone Project:

The selection and registration of topics for the BPharm Project are made accordingly as mentioned below:

- i. Collection of project topics from the faculty members.
- ii. Approving the project topics by Research and Ethical committees.
- iii. Announcing the project topics by the Faculty Development and Research Unit in the sixth semester.
- iv. Selection and registration of projects topics.
- v. Carrying out the project under the faculty member's supervision.

**b) Facilities, Experimental work and data collection for the Capstone Project.**

The experimental work (if any), collection of data for the project, and writing of the paper of the project are done by the students with the help of the facilities made available by Dubai Pharmacy College for Girls. These facilities are:

- Science Laboratories of Dubai Pharmacy College for Girls.
- Science Laboratories of Dubai Medical College for Girls.
- Instrumentation facilities of Central Laboratory of the Foundation.
- Computer labs and library.
- Public and/or private hospitals under the Ministry of Health.
- Pharmaceutical companies.
- Community pharmacies.

**Facilities for the writing of the project:**

The College provides sufficient facilities to the student for efficient writing of their graduation project paper.

Various facilities provided by DPCG are:

- Drug Information Center
- Central Library
- IT facilities

Others:

- Library of Dubai Health Authority Hospitals.

**c) Organization of Capstone Project**

The Capstone Project should be assembled in the order listed below:

1. Title page (titles, authors and affiliations)
2. Abstract ( required; 250 words or less for the bachelors project; double-spaced and organized as a statement of the problem, procedure and/or methods, results and conclusions).
3. Keywords
4. Graphical abstract
5. Introduction
6. Materials and methods
7. Results
8. Discussions
9. Conclusion
9. Acknowledgments
10. References

**Margins:** For copying and binding purposes, every page of the project article must be left 1.25"; top, right and bottom 1". Margins must be left-justified. All manuscript material must fit within these margin requirements (including tables, headers and footers, figures, graphs, and page numbers).

When full-page prints of photographs are desired, the image area of the print must conform to the same margins as the text.

**Spacing:** The abstract, acknowledgements, and introduction must be double-spaced. Footnotes, bibliographies, long quoted passages, as well as items in lists, tables, and appendices may be single-spaced. The article must be printed on one side of the paper.

**Style and Documentation:** Style and techniques of presentation, including documentation should correspond to standard practices employed in the scholarly field of the research article. Generally acceptable are the documentation styles in The Chicago Manual of Style (University of Chicago Press); The MLA Handbook for Writers of Research Papers (published by the Modern Language Association of America); or the Publication Manual of the *American Psychological Association*. Each candidate should resolve all questions of style and technique with her advisor before preparing the final copy.

**All the points mentioned above are discussed with the concerned supervisor. A draft copy is to be checked and approved from the Supervisor before the final copy is made.**

## 2) Submission of the Graduation Research Project for Evaluation

- i. Five copies of the graduation project article are submitted to the Head of Faculty Development and Research Unit, latest by 1<sup>st</sup> June.
- ii. The Dean forms an Evaluation Committee for the Project in consultation with the College Academic Council for the evaluation of the Project. The Evaluation Committee consists of the following:
  - a. A panel of external examiners
    - Two experts in the related field of research
  - b. A panel of internal examiners
    - Dean or Head of the concerned Department
    - Supervisors of the Capstone Project
- iii. The students have to present their project work in front of the members of the Evaluation Committee. The evaluation of the project is done in the first two weeks of June.
- iv. The evaluation is in the form of an oral presentation by the candidates. The distribution of marks (100) is as follows:

Assessment and Evaluation	
Assessment Tool	Score Distribution (%)
Thesis writing evaluation	25
Conference (poster/oral presentation)	25
Oral exam	25
Teamwork+ attendance and behavior	25
Total	100
*In case of published article:	
Publication	50
Oral exam	25
Teamwork + attendance and behavior	25

The following evaluation tools (rubrics) are used in evaluation.

Thesis evaluation Rubrics "Criteria"	Marks
<b>Research Idea: 5 Marks</b> <ul style="list-style-type: none"> <li>- The topic is of importance and specifically related to the field of study.</li> <li>- The topic has theoretical and practical importance to the field of study.</li> <li>- The topic demonstrates innovative thinking and creativity.</li> </ul>	
<b>Organization and Formatting: 5 marks</b> <ul style="list-style-type: none"> <li>- The project is well organized.</li> <li>- Structurally correct sentences with correct grammar and vocabulary.</li> <li>- The entire project is presented in appropriate format as per the college guidelines.</li> <li>- Presentation of the material is highly appropriate and professional.</li> <li>- Logical order of information based on topic and appropriate transitions between ideas.</li> </ul>	





<b>Content: (15 marks)</b> - The project is divided into clear heading as follows: ✓ <u>Abstract</u> ✓ <u>Graphical abstract</u> ✓ <u>Introduction</u> and Literature Review ✓ <u>Experimental or Methodology</u> ✓ <u>Discussion and Results</u> ✓ <u>Conclusion</u> ✓ <u>Citations &amp; References</u> - Detailed and comprehensive introduction, methodology and discussion are presented. - Shows creative thinking and thoughtful insight. - Shows critical analysis of research related to topic and compared to current study. - Conclusion is supported by information or data. - All citations and references are updated and appropriate to the study. - All citations and references are presented in proper format and do not need revision.		
<b>Total Marks:</b>		<b>/25</b>

Student name	Oral Presentation	Oral Presentation Evaluation					
		9	PPT content	8	Oral Discussion	8	Mark /25
1-	-Enthusiasm - Posture - Eye contact - Speaks clearly and no mispronunciation - Volume is loud enough to be heard -Preparedness for presenting the work - Deliver the idea in a clear way -The speaker is relaxed & comfortable. - Presentation is the right length.		- The presentation is easy to follow - Originality in presenting the work -Appropriate transition - All parts of the thesis are presented in a clear, representative way. - Introduction and closure are appropriate - Introduction provides sufficient background on the topic and previews the major points. - Rules of grammar, usage, and punctuation are followed; spelling is correct. - The presentation has all the requested information: answered all the points related with the topic.		- Answered the examiner's questions - Answered the critical thinking questions. - Respected her colleagues and did not disturb during their discussion		
2-							
3-							
4-							
5-							
6-							

Student name	Teamwork (12 marks)	Work Progress (13 marks)	Marks /25
	- Cooperation between the student and his group - Respect of time - Harmony - Behavior with the supervisor and colleagues - Contribution to the work	- Did the assigned work properly. - Submitted the assigned work on time. - Showed creativity and novelty.	
1-			
2-			
3-			
<b>Conference</b>			<b>/25</b>

Marking Scheme		
Item	Score out of 100	Percentage
Thesis writing evaluation (25 marks)		25%
A. Research Idea	5	
B. Organization and Formatting	5	
C. Content	15	
<ul style="list-style-type: none"> <li>✓ <u>Abstract</u></li> <li>✓ <u>Graphical abstract</u></li> <li>✓ <u>Introduction</u> and Literature Review</li> <li>✓ <u>Experimental or Methodology</u></li> <li>✓ <u>Discussion and Results</u></li> <li>✓ <u>Conclusion</u></li> <li>✓ <u>Citations &amp; References</u></li> </ul>		
Oral exam (25 marks)		25%
A. Oral Presentation	9	
B. PPT content	8	
C. Oral discussion	8	
Teamwork + attendance and behavior + Work Progress	25	25%
Conference	25	25%
Total	100	100%

- In case of late submission, the students will lose 2 marks per delay day till the 7th of June. After that, the submission will not be accepted and considered failed.
- The unsubmitted article will be considered failed.
- Upon evaluation, if the graduation project's article fails to meet the requirements for the degree (failed to obtain a minimum of 70%), a bachelor's student will not graduate. However, the student has the option to revise and resubmit the revised paper and make the resubmission on 1st of September and there will be considered passed without grades.
- In case of no submission in September, there will be redistribution of the students with a new supervisor.
- In cases where major plagiarism is alleged, the examination process does not proceed any further, and the case is investigated through DPCG disciplinary processes.
- In case of published article, the student will be awarded 50 marks for the publication ,and evaluated internally by oral exam (25 marks) and 25 marks for teamwork , attendance and behavior and work Progress

## Placement of Alumni





## DPCG FACULTY MEMBERS

Name	Degrees	Institution	Year
<b>Prof. Dr. Saeed Ahmed Khan</b> Dean, Professor, Pharmaceutical Chemistry Department	Ph. D. (Chemistry) M. Phil. (Chemistry) M. Sc (Chemistry)	Delhi University (India) Delhi University (India) Aligarh Muslim University (India)	1985 1982 1980
<b>Prof. Dr. Naglaa Gamil Shehab</b> Chief Academic Officer Professor, Clinical Pharmacy & Pharmacotherapeutics Department	Ph.D.(Pharmacognosy & Phytochemistry). M.Pharm. (Pharmacognosy) B.Pharm	Cairo University (Egypt) Cairo University (Egypt) Cairo University (Egypt)	2004 1998 1991
<b>Prof. Fazilatun Nessa</b> Head, Pharmaceutical Chemistry Department Professor in Pharmaceutical Chemistry	Ph.D. (Pharmaceutical Chemistry) M.Pharm(Pharmaceutical Chemistry) B.Pharm	University Sains Malaysia(Malaysia) University of Dhaka (Bangladesh) University of Dhaka (Bangladesh)	2004 1991 1989
<b>Mrs. Khuloud Abu Shawish</b> Teaching & Research Assistant.	MSc. (ongoing) B.Pharm	Sharjah University Dubai Pharmacy College	2020 2014
<b>Mrs. Suzan</b> Professional Staff	Master of Science	Mahatma Gandhi University	2004
<b>Prof. Dr. Aliasgar Fakruddin Shahiwala</b> Graduate Program Director Professor in Pharmaceutics	Postdoctorate Ph. D. (Pharmacy) M.Pharm. B.Pharm	Northeastern University (USA) M.S.University (India) M.S.University (India) L.M., Gujarat University, India	2007 2005 1999 1996
<b>Prof. Dr. Bazigha K. Abdul Rasool</b> Head, Pharmaceutics Department Professor in Pharmaceutics	Ph.D. (Pharmaceutics) M.Sc. (Pharmaceutics) B. Pharm (Pharmacy Sciences)	University of Baghdad, (Iraq) University of Baghdad (Iraq) University of Baghdad (Iraq)	2004 1998 1990
<b>Dr. Rana Sammour</b> Assistant Professor in Pharmaceutics Head Student Affairs	PhD Pharmaceutical Technology  Msc. Pharmaceutical Technology  B.Pharm	International Islamic University of Malaysia (IIUM) (Malaysia) Ajman University of Science and Technology (UAE) Dubai Pharmacy College (UAE)	2020  2013 2003
<b>Mrs. AlZahraa Mahmoud Hussain</b> Assistant Lecturer Head Graduate Affairs and Career Guidance	PhD ( ongoing) MPharm Pharmaceutical Product Development B.Pharm	University of Strathclyde (UK) Dubai Pharmacy College UAE Dubai Pharmacy College (UAE)	2019 2016 2008
<b>Prof. Mirza Baig</b> Head, Clinical Pharmacy & Pharmacotherapeutics Department Professor in Clinical Pharmacy Program Coordinator – MPharm Clinical Pharmacy	PhD (Clinical Pharmacy) MPharm B.Pharm	University Sains Malaysia RGUHS, India Gulbarga University, India	2011 2003 2000
<b>Dr. Gazala Afreen Khan</b> Head, Examination and Evaluation Unit Assistant Professor Clinical Pharmacy and Pharmacotherapeutics Department	Ph. D. (Genetics) M. Sc (Genetics) B.Sc	Osmania University (India) Osmania University (India) Osmania University (India)	2004 1998 1996
<b>Dr. Hanan Sayed Anbar</b>	Ph.D. (Pharmacology & Toxicology) M. Sc. (Pharmacology & Toxicology)	Mansura University (Egypt) Mansura University (Egypt)	2017 2010



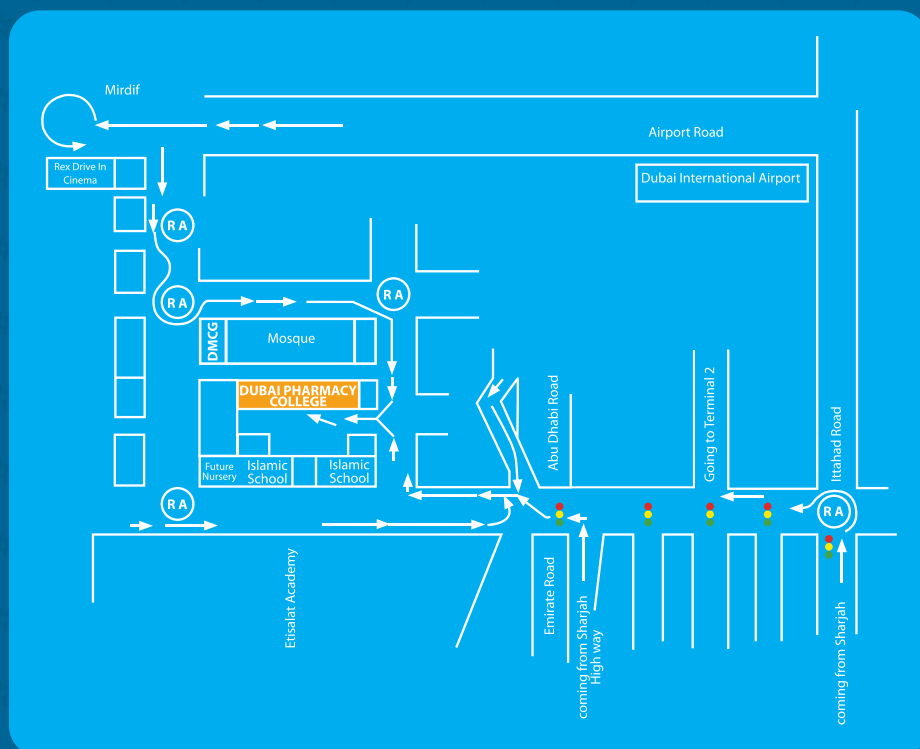
## DPCG FACULTY MEMBERS

Name	Degrees	Institution	Year
Head of Faculty Development and Research Unit Assistant Professor in Clinical Pharmacy & Pharmacotherapeutics Department			
<b>Dr. Ammar Ali Saleh Jaber</b> Head, Professional Practice Experience Unit Assistant Professor in Clinical Pharmacy	Postdoctorate PhD (Clinical Pharmacy) MPharm (Pharmacy)	University Sains Malaysia University Sains Malaysia Jamia Hamdard, India	2018 2017 2011
<b>Dr. Doaa Kamal</b> Assistant Professor in Clinical Pharmacy & Pharmacotherapeutics Department	PhD (Clinical Pharmacy) M.Sc. (Clinical Pharmacy) B.Pharm	International Islamic University of Malaysia (IIUM) (Malaysia) Jordan University (Jordan) Dubai Pharmacy College (UAE)	2020 2010 2002
<b>Prof. Kishore Gnana Sam</b> Professor in Pharmacy Practice Clinical Pharmacy Consultant in DMU Hospital	PhD (Pharmacy Practice)	Manipal University of Higher Education	2009
<b>Ms. Yousra Adnan</b> Assistant Lecturer Clinical Pharmacy & Pharmacotherapeutics Department	PhD (ongoing) MSc. Pharmacology & Toxicology B.Pharm	University of Strathclyde (UK) UAE University Dubai Pharmacy College (UAE)	2019 2015 2006
<b>Ms. Eiman Shams Elddin Elgailani</b> Assistant Lecturer Clinical Pharmacy & Pharmacotherapeutics Department	PhD (ongoing) MPharm Clinical Pharmacy B.Pharm	University of Strathclyde (UK) Dubai Pharmacy College UAE Dubai Pharmacy College UAE	2019 2015 2005
<b>Ms. Maram Omar Abbas</b> Teaching Assistant in Clinical Pharmacy	MPharm (Clinical Pharmacy)	Dubai Pharmacy College UAE)	2021
<b>Mrs. Sabeena Salam</b> Assistant Professor Head, Institutional Effectiveness and Publications Unit Head of General Education and Elective Requirements	PhD (ongoing) CELTA B.Ed (English) M.Phil.(English for Specific Purposes)	BITS Pilani (UAE) University of Cambridge (Dubai) Calicut University (India) Pondicherry University (India)	-- 2007 2002 1995
<b>Ms. Sadaf Sana</b> Instructor in Psychology Student Counselor	BS (Hons.) Applied Psychology MS Industrial and Organizational Psychology	Kinnaird College for Women, Pakistan Government College University, Pakistan	2013 2015
<b>Ms. Yasmeen Yaser Salem</b> Teaching Assistant Department of Pharmaceutics.	B.Pharm MSc. (ongoing)	Dubai Pharmacy College	2019



FACULTY from DMCG	
<p><i>Dr. Shifaa Khanday</i> Assistant Professor in Anatomy</p> <p><i>Prof.Dr.Abeer Abdel Moneim</i> Professor in Physiology</p> <p><i>Dr. Rasha</i> Associate Professor in Physiology</p> <p><i>Prof. Dr. Ghazala Mehdi</i> Professor in Pathology</p>	<p><i>Prof. Dr. Hafez</i> Professor in Biochemistry.</p> <p><i>Prof. Dr. Naglaa Raafat Abdl Raob,</i> Professor in Biochemistry.</p> <p><i>Prof. Dr. Samia</i> Professor in Psychology</p> <p><i>Prof. Tasneem Sandozi</i> Professor in Pharmacology</p>
PART-TIME FACULTY	
<p><i>Dr. Jinan</i> PhD (UK) Assistant Professor in Islamic Studies</p>	<p><i>Ms Nagina Jannat</i> PharmD – MBA Marketing Instructor – Innovation and Entrepreneurship</p>
<p><i>Dr.Mariem Galadari</i> Lecturer in Pharmacy Laws Cairo University</p>	<p><i>Bushra Parveen</i> Lecturer in General Education Assistant Librarian (DMC-DPCG)</p>

SUPERVISORS FOR PROFESSIONAL PRACTICE EXPERIENCE	
<p><b>HOSPITALS</b></p> <p><i>Prof. Dr. Ali Syed Hussain</i>, M.Sc., Ph.D.(USA) Director, Pharmaceutical Services, Coordinator, Professional Practice Experience, Dubai Health Authority-Dubai</p> <p><i>Mrs. Amal Ali Salem</i>, B. Pharm. Chief Pharmacist Supervisor, Al Wasl Hospital- Dubai.</p> <p><i>Mr. Moh'd Sameh Ali</i>, B. Pharm. Chief Pharmacist, Supervisor, Rashid Hospital- Dubai.</p> <p><i>Mr. Murtada Mohd.</i>, B. Pharm. Actg., Chief Pharmacist, Supervisor- Dubai Hospital, Dubai.</p> <p><i>Mrs. Fareeda Al Khaja</i>, B. Pharm. (Egypt)Chief Pharmacist Supervisor, Al Maktoum Hospital- Dubai.</p> <p><i>Ms. Lara Qadir</i> Mafraq Hospital, Abu Dhabi</p> <p><i>Ms. HebaElkholy</i> SKMC Hospital, Abu Dhabi</p> <p><i>Ms. Mahat Hussain</i> Senior Pharmacist (Dubai Health Authority</p>	<p><b>PHARMACEUTICAL INDUSTRY</b></p> <p><i>Mr. Idrees Siddiqui</i> Manager Technical Operations Global Pharma Co LLC, Dubai- UAE</p> <p><i>Mr. Ijaz Sheikh</i> Pharmaceutical Industry</p> <p><i>Mr. Ejaz Shahid</i> Pharmaceutical Industry</p> <p><b>COMMUNITY PHARMACY</b></p> <p><i>Ms. Mariam M.Pharm</i> Contact Number: +971543056363 Email ID: <a href="mailto:mariam.o@supercare.ae">mariam.o@supercare.ae</a> Position: Regulatory Affair Manager P.O.Box: 118347, Dubai. U.A.E <i>Supercare Pharmacy</i></p> <p><i>Mr.Mohd.Sandeep M.pharm</i> Contact Number: 0529236592 Email ID: <a href="mailto:m.sandeep@asterpharmacy.com">m.sandeep@asterpharmacy.com</a> <i>Aster Pharmacy</i></p> <p><i>Mr. Eby John M.Pharm</i> Contact Number: +971529034923 Email ID: <a href="mailto:eby.k@asterpharmacy.com">eby.k@asterpharmacy.com</a> <i>Aster Pharmacy</i></p>



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