Bachelor of Pharmacy Catalog

2022-2023

"Dubai Pharmacy College for Girls located in the Emirate of Dubai is officially licensed from 07/02/2016 to 20/01/2021 by the Ministry of Education of United Arab Emirates to award the Bachelor of Pharmacy degree in higher education."

DPCG has fulfilled the certification requirements set forth by ACPE for the Professional Degree Program in Pharmacy and Provisional Certification

(Category 1 and 2), is hereby granted through January 31,2024



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 Mohammed Bin Zayed Al Nahyan President of the United Arab Emirates

H. H. General Shaikh Mohammed 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

| Fall Se | mester | | |
|--|--------------------------|--------------------------------|---|
| Event | Day | Dates | Date / Hijri |
| Beginning of rest exams | Monday | 22/08/2022 | Muharram'24-1444 |
| Beginning of 1st Semester for 2 nd , 3 ^{rd,} and 4 th years | Monday | 29/08/2022 | Safar'2-1444 |
| Orientation & Beginning of MPharm Clinical Pharmacy 1st Semester classes | Saturday | 03/09/2022 | Safar'7-1444 |
| Beginning of 1st Year classes and Welcome Ceremony | Monday | 05/09/2022 | Safar'9-1444 |
| Beginning of Final Exams of 4th year | Monday | 28/11/2022 | Jumada al-Ula'4-1444 |
| Beginning of Final Exams for 1st, 2nd, and 3rd years | Monday | 12/12/2022 | Jumada al-Ula'18-1444 |
| Winter Vacation | Saturday to Sunday | 17/12/2022 to 01/01/2023 | Jumada al-Ula'23-1444 to Jumada al-Akhirah'8-1444 |
| Continue Final Exams for 1st, 2nd, and 3rd years | Monday | 02/01/2023 | Jumada al-Akhirah'9-1444 |
| Beginning of Final Exams for M. Pharm 1st & 3rd Semester | Saturday | 07/01/2023 | Jumada al-Akhirah'14- 1444 |
| Beginning of Re-sit Exams for 1st, 2nd and 3rd years | Sunday | 15/01/2023 | Jumada al-Akhirah'22- 1444 |
| End of Fall | Semester | | |
| | | | |
| Spring S | emester | | |
| Beginning of 2nd Semester for 4th years | Monday | 02/01/2023 | Jumada al-Akhirah'9-1444 |
| Beginning of 2nd Semester for 1st, 2 nd , 3 rd | Monday | 16/01/2023 | Jumada al-Ula'23-1444 |
| Commencement of Classes for M. Pharm 2nd Semester | Saturday | 04/02/2023 | Rajab'13-1444 |
| Beginning of Final Examination of 4th year | Monday | 13/03/2023 | Rajab'22-1444 |
| Beginning of Midterm Exams 1 st , 2 nd and 3 ^{rd,} | Monday | 20/03/2023 | Sha'ban'28-1444 |
| Spring Vacation | Monday to Sunday | 27/03/2023 to 02/04/2023 | Ramadan'5-1444 to Ramadan'11-1444 |
| | | | 1 |

Monday

to

Friday

Monday

Monday

Saturday

Summer Semester

Beginning of Industrial Training for 4th year Batch 28

Beginning of Hospital Training for 4th year Batch 28

Beginning of Final Exams for M. Pharm 2nd Semester

Beginning of Final Examinations for 1st, 2nd and 3rd years

03/04/2023

07/04/2023

10/04/2023

15/05/2023

03/06/2023

Ramadan'12-1444

Ramadan'16-1444

Ramadan'19-1444

Shawwal'25-1444

Dhul-Qi-dah'14-1444



| Beginning of Introductory Professional Practice Experience for 2nd year (5 weeks) | Monday | 5/06/2023 | Dhul-Qi-dah'16-1444 |
|--|--------|------------|---------------------|
| Beginning of Summer Semester for 1 st and 3rd years | Monday | 5/06/2023 | Dhul-Qi-dah'16-1444 |
| Beginning of Final Examinations for 1 st and 3rd years | Monday | 3/07/2023 | Dhul-Hijjah'15-1444 |
| Beginning of Re-sit Exams for 1st, 2nd and 3rd years | Monday | 9/07/2023 | Dhul-Hijjah'21-1444 |
| Summer Vacation Begins | Monday | 17/07/2023 | Dhul-Hijjah'29-1444 |

| Events | | |
|--|--|--|
| Date | | |
| Saturday 30 July 2022 (during summer holiday) | | |
| Saturday 8 October 2022 | | |
| Thursday 1 st December 2022 | | |
| Friday and Saturday 2 nd - 3 rd December, 2022 | | |
| Sunday, 1 st January, 2023 – during winter break | | |
| 2 nd or 3 rd week of March, 2023 | | |
| Thursday -Sunday 20-23 April, 2023 | | |
| Tuesday -Friday 27 -30 June,2023 | | |
| | | |

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

**Beginning of Academic Year 2023-2024 will be on Monday 28th August, 202</mark>3



| Table of Contents | |
|--|---|
| Message from the Founder | 0 |
| Foreword from the Dean | 1 |
| History of Dubai Pharmacy College for Girls | 2 |
| DPCG Partnerships | 3 |
| Vision | 5 |
| Accreditation and Licensure | 5 |
| Organizational Structure | 7 |
| 1. Program | 7 |
| 2. Admission Requirements | 7 |
| 3. Student Intake and Fee Structure | 1 |
| 4. Prospective Careers | 3 |
| 5.A. GENERAL EDUCATION REQUIREMENTS1 | 5 |
| 5. B. BPharm Program | 0 |
| 6. Study Plan for the BPharm Program | 5 |
| 6.A. Distribution of Courses | 6 |
| 7. Courses of Study in the BPharm program | 8 |
| 8. Course Description | 9 |
| 9.Examination, Grading & Assessment | 7 |
| 9.1.Scheme of Assessment | 2 |
| 9.2.Seminar Rubrics | 5 |
| 10. Teaching Activities (Pedagogy) | 6 |
| 11. Progress Policy Guidelines | 8 |
| 12. Policy for Completion of Undergraduate59 | 9 |
| 13.Student Rights & Responsibilities | 9 |
| 14. Student Appeals Policy | 0 |
| 15. Students Grievance Policy | 1 |
| 16.Education Support Facilities | 1 |
| 17. Students' Support Services | 3 |



| 18. Glossary of Terms | 64 |
|--|----|
| Appendix A:_Professional Practice Experience | 67 |
| Appendix B: Capstone Project | 79 |
| Placement of Alumni | 85 |
| DPCG FACULTY MEMBERS | 86 |



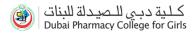
Message from the Founder Haji Saeed Bin Ahmed Al Lootah (1923-2020)

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 |
|-------------|---|
| created und | sionary and philanthropist Hajj Saeed Bin Ahmed Al-Lootah founded Dubai Pharmacy College for Girls in September 1992. It was er the umbrella of Dubai Institute of Environmental Research, with the goal of establishing itself as a state-of-art institute in ical 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 accredited degree of B.Pharm. |
| 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 BPharm curriculum. |
| 2004 | Awarded the Dubai Quality Appreciation Award for being the Best Teaching Institute in the UAE. |
| 2007 | February: Dr. Saeed Ahmad Khan was appointed as the Dean. |
| | Initiated the open lecture series 'Pharmatalk- Share and Inspire', providing a platform for sharing best practices. |
| | Introduced advanced courses; Pharmacogenomics, Pharmaceutical Technology, Instrumentation Techniques, Clinical Testing |
| | Methods, Alternative and Complementary Medicines and Clinical Pharmacy, Pharmacoepidemiology. |
| | Initiated Journal Alert Forum (JAF) to bring in awareness of E-Journals, which resulted in periodical seminar presentations. |
| 2008 | Renovation of total infrastructure of the College, administration offices, faculty and staff offices, lecture rooms, the computer labs with all facilities. |
| | Major curriculum revision was done with the inclusion of newly revised assessment methods. |
| | New Administration Units and Committees were formed. |
| | Training in Global Pharmaceutical laboratories for students 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 research ab and abs for with harm were designed in the Dr Co extension in an adjacent building. |



| DPCG Partnerships | | | |
|---|--|--|--|
| PROFESSIONAL PRACTICE EXPERIENCE PARTNERS | | | |
| ORGANIZATIONS | Description | | |
| Dubai Health Authority (DHA) | Undergraduate students in their last semester undertake and under course Hospital training in different hospitals of DHA. | | |
| | • Postgraduate students undertake their Clinical Clerkship in their final year | | |
| Iranian Hospital- Dubai | of study Undergraduate students in their last semester undertake and under | | |
| | course Hospital training Postgraduate students undertake their Clinical Clerkship in their final year of study | | |
| Cleveland Clinic Abu Dhabi (CCAD) | Postgraduate students undertake their Clinical Clerkship in their final year of study | | |
| Military Hospital- Abu Dhabi | • Postgraduate students undertake their Clinical Clerkship in their final year of study (applicable only for UAE Military staff) | | |
| MOHAP hospitals | 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 & Fujairah Hospital) | | |
| Thumbay Hospital- (GMU)-Ajman | Undergraduate students in their last semester undertake and under course Hospital training | | |
| | Postgraduate students undertake their Clinical Clerkship in their final year of study in Thumbay Hospital – Ajman. | | |
| Emirates European Hospital | Undergraduate students in their last semester undertake and under course Hospital training | | |
| NMC Hospitals | Undergraduate students in their last semester undertake and under course Hospital training | | |
| Dr. Sulaiman Al Habib Hospital | Undergraduate students in their last semester undertake and under course Hospital training | | |
| Althiqa Pharmacy Group | Community Pharmacy training for undergraduate students | | |
| Aster Group | Community Pharmacy training for undergraduate students. | | |
| Monash University | Collaborate with Monash University to provide Simulation training | | |
| | ACADEMIC PARTNERS | | |
| University of Strathclyde | Memorandum of understanding with University of Strathclyde providing students the opportunity to pursue postgraduate /doctoral studies. | | |
| Universiti Sains Malaysia (USM) | Opportunity for students to pursue postgraduate/doctoral studies Faculty member in the Department of Clionical Pharmacy and Pharmacotherapeutics is an approved supervisor by USM | | |
| International Islamic University Malaysia (IIUM) | Opportunity for students to pursue postgraduate/doctoral studies Faculty member in the Department of Clionical Pharmacy and Pharmacotherapeutics | | |
| | and Department of Pharmaceutics are approved supervisors by IIUM | | |
| Manipal Academy of Higher | DPC and MAHE have common interest in field of pharmaceutical and life | | |
| Education –(MAHE- Dubai) | sciences education and research thus have a collaboration in the fields of | | |
| | academics, education and research. | | |
| Universitas 17 Agustus 1945 | DPC and Universitas 17 Agustus 1945 Jakarta have common interest in field of | | |
| Jakarta | pharmaceutical and life sciences education and research thus have a | | |
| | collaboration in the fields of academics, education and research. | | |

| SVKM'S Dr. Bhanuben Nanavati DPC and SVKM'S Dr. Bhanuben Nanavati College of Pharmacy have comm | | |
|--|--|--|
| College of Pharmacy | interest in field of pharmaceutical and life sciences education and research | |
| | thus have a collaboration in the fields of academics, education and research. | |
| Ulster University, N Ireland 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. | |
| Institute of Pharmaceutical | DPC and UVAS have common interest in field of pharmaceutical and life | |
| Sciences, (IPS) University of | nces, (IPS) University of sciences education and research thus promoting academic and professional | |
| Veterinary and Animal Sciences cooperation in training | | |
| (Uvas), Lahore, Pakistan | | |
| University of Colorado SKAGGS | DPC collaborates with University of Colorado SKAGGS School of Pharmacy | |
| School of Pharmacy and | and Pharmaceutical Sciences to provide studnets to clinical training | |
| Pharmaceutical Sciences | | |
| Professional Regulatory Affairs | DPC partners with PRA to offer certificate courses in Regulatory Affairs, | |
| (PRA) Consultancy Pharmacovigilance, etc. | | |
| | STUDENT EXPERIENCE | |
| International Pharmaceutical | Students with the opportunity to explore numerous outreach activities, | |
| Student Federation (IPSF). 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.



BOARD OF TRUSTEES



Haj Saeed Bin Ahmed Al Lootah (Late) Founder and Former Chairman Board of Trustees



H.E Lieutenant General Dhahi Khalfan Tamim Lieutenant General and the current Deputy Chief of Police and General Security. Chairman Board of Trustees



Eng. Yahya Saeed Lootah *Vice Chairman - Board of Trustees*



Eng. Hussain Nasser Lootah *Executive Director, SS Lootah Group Former Director General of Dubai Municipality Member, Board of Trustees*



Dr. Mohammed Murad Abdulla Director, Foresight and Decision-Making Support, Dubai Police Member, Board of Trustees



Dr. Wadia Mohamed Al Sharief Director, Medical Education and Research Department, Dubai Health Authority Member, Board of Trustees



Dr. Fatima Sultan Al Olama Pediatrician, Champion of Women and Children's Healthcare Member, Board of Trustees

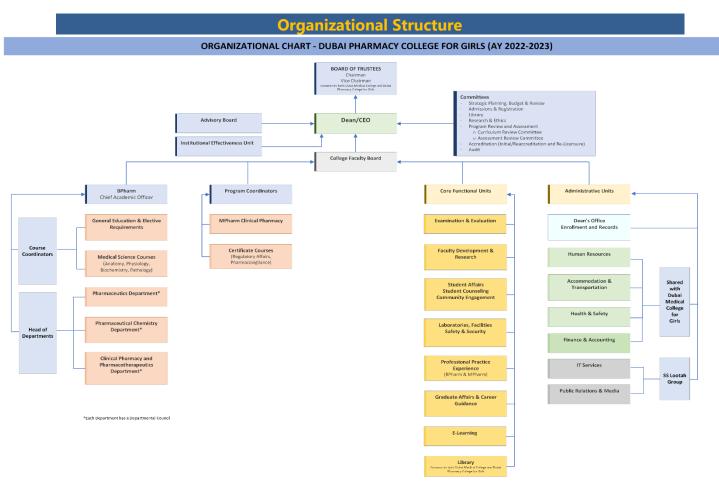


Prof. Saeed Ahmed Khan Dean, Dubai Pharmacy College for Girls



Mr. Sultan Abdullah Bin Hada Al Suwaidi Chairman, Sharjah Economic Development Department (SEDD) Member. Board of Trustees





Reviewed and Updated on September 2022

1. Program

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

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:



| Academic | 1. A minimum High School Average of 85% for Advanced Track or 80% for Elite | | |
|---------------|--|--|--|
| Requirements: | Track or equivalent in Standardized International Systems is required with no | | |
| | admission of General Track applicants. | | |
| | 2. English Language Proficiency Test approved by the CAA | | |
| | - Internet Based Test (IBT) TOEFL 61 out of 120 (TOEFL PbT is not accepted) | | |
| | - International English Language Testing System (IELTS-Academic) 5.0 | | |
| | - EmSAT 1100 – 1225 | | |
| | 3. An EmSAT score of 800 for Arabic Language. | | |
| | 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). | | |
| | 5. Passing a personal interview set by DPCG | | |
| | Additional Requirements: | | |
| | 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 / Chemistry/Physics/Math) at the GCE | | |
| | Advanced Subsidiary or Advanced level with at least C grade. 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: | | |
| | Standard or Higher level Math | | |
| | Standard or Higher level Biology | | |
| | Standard or Higher level Chemistry | | |

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 admission committee member then review each screened application about the applicant's characteristics and qualifications.

Based on this initial screen, the most qualified applicants are then invited for the interview. The date of the interview for selection is decided by the admission committee. The interview will hold either face to face on the College campus or online. The admission committee will invite one or two faculty members to participate on the interview day as part of their job duties. Each applicant is interviewed by admission committee members and a faculty member who actively teach in the pharmacy program. Whenever possible, faculty members from the Department of Pharmaceutical Sciences are paired with a faculty member from the Department of Clinical Pharmacy to ensure an even mix of views and approaches. All faculty involved in the interview process are informed before the interviews about the nature of the interview process, the expectations during the interviews, scoring rubrics, and the schedule of events by the admission committee chair. The interview will be scored using a rubric (Appendix: AP-F-08). Towards the end of the interview, the applicant is allowed to ask questions about various aspects of the program.

Based on the interview results and considering other admission requirements, the admission committee then makes recommendations to the Dean regarding which students should be admitted to the BPharm program. Students are notified if they will be admitted, wait-listed, or denied admission by the Head of students' enrolment.



DPCG Conditional Admission

Conditional admission will be allowed for not achieving the Arabic Language EmSAT score but not for English Language.

RECONGNITION OF PRIOR LEARNING/TRANSFER ADMISSION POLICIES

The College also welcomes applications from candidates studying with other educational institutions in Diploma in Pharmacy/BPharm programs/Science/Dentist/Medicine who wish to transfer to DPCG. It may be possible to grant exemption from 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:

- **1.** Dubai Pharmacy College for Girls (DPCG) accepts transfer of students from accredited College with a curriculum that is comparable to that offered at DPCG.
- **2.** The student must provide a letter of application to the Dean of the College specifying reason (s) for requesting transfer and desired date of transfer.
- **3.** Dubai Pharmacy College requires applicants to submit their transcripts for evaluation of transferable subjects /teaching hours from previous College experiences.
- 4. No student who has been dismissed from any institute will be eligible for transfer to DPCG.
- **5.** All applicants must provide conduct certificates from the institute where they are currently enrolled.
- **6.** Student applying for transfer to DPCG must study more than 60% of the syllabus of B. Pharm at DPCG.
- 7. All applicants should contact the Dean's office to inquire about having their transcripts reviewed.
- **8.** The final decision for approval of transfer will be made by the Dean after review of the transfer request by the Chief Academic Office of the College.
- 9. Transfer of students is not allowed after second year.
- **10.** Before considering any application for transfer, existence of an appropriate seat for the student should be considered.

The faculty member should equate the transferred students in the Course Equivalency Form for Transfer Students.

Transfer admission policies for BPharm

- **1.** Students must meet the English language proficiency requirements as set by the Ministry of Higher Education- Higher Education Affairs, UAE.
- **2.** The student transferring from another accredited college must be in a good academic standing (a minimum CGPA of 2.0, C grade, on a 4.0 scale or equivalent).
- **3.** Before attending Dubai Pharmacy College, attested records from the previous College and higher secondary school should be submitted to Head Enrollment and Records

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 50 students not exceeding 60 students in total. | | | |
|--|--|---|--|
| Fees | Total Amount/Year | Mode of Payment | |
| Tuition [*] | Dhs 45,000/- (+5% VAT applicable) per year (Semester 1- Semester 8) Dhs 25000/- (+5% VAT applicable) – (Semester 9) Dhs 1350/credit hour | Dhs 22,500/- at time of admission Four installments | |
| Hostel | Dhs 12000/- to 18000/- | Four installments with tuition fees. | |
| Transportation (+5% VAT a | Transportation (+5% VAT applicable) | | |
| Dubai(daily) | Muhaisnah/Mizhar/Mirdiff/Rashidiya/Twar/Qus ais/Nahda Dhs3000/- Deira/Bur Dubai/Satwa/Karama/Umm Suqaim/Jumeirah/Barsha Dhs4000/- | Four installments with tuition fees. | |
| Sharjah/Ajman(daily) | Dhs 5000/- | | |
| Abu Dhabi, Fujairah, Al Ain, Baniyas (weekly) | Dhs 5000/- | Four installments with tuition fees. | |

*NOTE:

The tuition fees once communicated will remain the same throughout the course for the four and half years 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:

Students from the MOE 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.

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.

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.

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 timetable 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

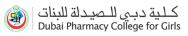
- Research on drugs in various research centers
- > Research on medicinal herbs, natural products, biotechnology and genetic engineering
- Research on other areas of pharmaceutical sciences

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.A. GENERAL EDUCATION REQUIREMENTS

1. 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.

| | GER | LEARNING OUTCOMES | | | | | |
|---------|---|---|--|--|--|--|--|
| GER-LO1 | Quantitative reasoning | Apply mathematical and statistical reasoning to discipline specific problems and decision making. | | | | | |
| GER-LO2 | Communication skills | Interchange ideas and information effectively through writing, speech, and visual and digital media | | | | | |
| GER-LO3 | Ethical reasoning | Assess and weigh moral beliefs and practices, and their applications to ethical dilemmas | | | | | |
| GER-LO4 | Technology and Information literacy | Locate, evaluate, cite, and effectively using information | | | | | |
| GER-LO5 | Diverse perspectives and experiences | Acquire knowledge and analytical skills to understand a variety of perspectives and experiences. | | | | | |
| GER-LO6 | Critical Inquiry | Systematic questioning and analysis of problems, issues, and claims | | | | | |
| GER-LO7 | Wellness literacy | Acquire knowledge in science-based health fitness and aesthetic concepts. | | | | | |
| GER-LO8 | Innovation | Explore how to generate creative ideas using mindsets and practices exhibited by successful innovators. | | | | | |

I. Course Alignment to GER Learning Outcomes

| GER Learning Outcomes | Quantitative reasoning | Communicatio n skills | Ethical reasoning | Technology and Information literacy | Diverse perspectives and experiences | Critical Inquiry | Wellness literacy | Innovation and Design Thinking |
|---|---------------------------|--------------------------|----------------------|--|---|------------------|----------------------|--------------------------------------|
| GE701 Mathematics and Statistics | √? | | | | | | | |
| GE702 Medical & Pharmaceutical Terminology & Information Literacy | | √? | | | | √? | | |
| GE703 Computer Applications | | √? | | √? | | √? | | |
| GE704 Islamic Studies | | | √? | | | | | |

| GE705 History of Pharmacy | | | | | √ ? | √? | | |
|---|-----------|----|----|----|------------|----|----|----|
| GE706 Positive Psychology | | | | | | √? | √? | |
| GE707 Green & Sustainable Pharmacy | | | √? | | √? | √? | √? | |
| GE708 Arabic Language Skills | | √? | | | | | | |
| GE709 UAE Society | | | | | √? | | | √? |
| GE710 Innovation and Entrepreneurship | | | | √? | | √? | | √? |
| • Courses generally align to 2-4 program learning | g outcome | 1 | 1 | I | 1 | | | |

II. Program Effectiveness – GER-LOs Assessment

Knowledge, skills, and competencies acquired in various areas of Mathematics, Linguistics, Humanities, Social Sciences and Science will be assessed in the following courses offered in the BPharm program.

| | GER Learning Outcome | | General education requirement courses aligned to the GER-LOS | GER effectiveness assessment in B- Pharm program | Indirect measures | KPI (2021- 2025) Data will be received from (IE) annually |
|---|-----------------------------------|---|---|--|--|--|
| 1 | Quantitat ive reasonin g | Apply mathematic al and statistical reasoning to discipline specific problems and decision making | GE701 Mathematics and Statistics | CP723 Calculation in Practice CP709 Research Methodology and Biostatistics | Graduate destination survey results questionnaire. Preceptors' satisfaction survey | 80% of the graduates satisfied with quantitative reasoning 80% Preceptors' satisfaction |



| | 1 | 1 | 1 | 1 | 1 | |
|---|-----------------------------|--|--|---|--|--|
| 2 | Communi cation skills | Interchange ideas and information effectively through writing, speech, and visual and digital media | GE702 Medical & Pharmaceutical Terminology & Information Literacy GE703 Computer Applications GE708 Arabic Language Skills | Capstone project presentation | Faculty-External examiner satisfaction survey Plagiarism report Number of students participating in DUPHAT Number of prizes won in DUPHAT | 80% Faculty- External examiner satisfaction 100% of students should comply with DPC plagiarism policy (All fourth year students' participatio n in DUPHAT Number of prizes won in DUPHAT in different categories |
| 3 | Ethical reasonin g | Assess and weigh moral beliefs and practices, and their applications to ethical dilemmas | GE704 Islamic Studies GE707 Green & Sustainable Pharmacy | Report submitted by the HOD from clinical pharmacy & pharmacotherapeutics & Pharmaceutics department | Academic Integrity Number of Cheating cases in Exams Disciplinary Reports | Zero tolerance Zero tolerance-(report from student affairs on attendance ,) |



| 4 | Technolo gy and Informati on literacy | Locate, evaluate, cite, and effectively using information | GE703 Computer Applications GE710 Innovation and Entrepreneursh ip | Capstone project report | • | Faculty satisfaction survey- Plagiarism report | • | 80% of the students satisfied with IT skills and referencing skills 100% of students should comply with DPC plagiarism policy (|
|---|--|---|--|--|---|---|---|--|
| 5 | Diverse perspecti ves and experienc es | Acquire knowledge and analytical skills to understand a variety of perspectives and experiences. | GE705 History of Pharmacy GE707 Green & Sustainable Pharmacy GE709 UAE Society | EC7011 - Organizational Behavior and Cultural Diversity | • | Number of students participating in Global Day Number of students participating in IPSF | • | Student satisfaction with Global day Overall student participatio n in IPSF |
| 6 | Critical Inquiry | Systematic questioning and analysis of problems, issues, and claims | GE702 Medical & Pharmaceutical Terminology & Information Literacy GE703 Computer Applications GE705 History of Pharmacy GE706 Positive Psychology GE707 Green & Sustainable Pharmacy GE710 Innovation and Entrepreneursh ip | Integrative Problem Based Learning (IPBL) | • | Faculty satisfaction survey | • | 80 % Faculty satisfaction |



| 7 | Wellness literacy | Acquire knowledge in science- based health fitness and aesthetic concepts. | GE706 Positive Psychology GE707 Green & Sustainable Pharmacy | Community engagement health awareness initiatives | • | Exit survey results Student satisfaction rate with DPC experience | • | 80% of the graduates satisfied with counselling skills 80% of students satisfied with DPC experience |
|---|--|--|--|---|---|--|---|--|
| 8 | Innovatio n and Design Thinking | Explore how to generate creative ideas using mindsets and practices exhibited by successful innovators. | GE709 UAE Society GE710 Innovation and Entrepreneursh ip | Community engagement projects | • | Number of innovative start-ups | • | Track innovative start-ups by DPC students |



5. B. BPharm Program

PROGRAM AIMS

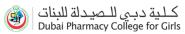
- Produce pharmacists having knowledge, skills and competencies equivalent to local and International Standards of BPharm degree.
- Initiate research which will utilise locally available materials and data for possible use in pharmaceutical fields.
- Practice according to internationally accepted professional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

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



| | | 5.B PROGRAM OUTCOM | VIES | | |
|---------------------------|---|--|-------------------------------------|---|---|
| QF Emirates Level 7 | Program outcome: On successful completion of this program, the students will be able to: | Course Name | CAPE Educational Outcomes | Learning/ Teaching Methods and Strategies | Types/ Methods of assessment |
| Knowledge | A1 . 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. | -Pharmaceutical Organic Chemistry I -Pharmaceutical Organic Chemistry II -Medicinal Chemistry I -Medicinal Chemistry II -Medicinal Chemistry III -Instrumental Analysis -Pharmacology & Therapeutics-I,II,III ,IV, V -Clinical Toxicology - Elective courses: Area II -Mathematics and Statistics -Medical & Pharmaceutical Terminology and Information Literacy - Computer Applications | Learner | Lectures, Tutorials, Practical, Self-Directed Learning, Seminars, Problem Based | Written Examinations, MCQ, Practical Reports, Practical Exam Project Report, Poster, Quiz, Case discussion |
| | A2. 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. | -Instrumental Analysis Natural Medicines, Safety and Efficacy, -Introduction of Pharmacy -Pharmaceutics-I -Pharmaceutics-II - Pharmaceutical Technology -Pharmaceutical Biotechnology | -Learner - Innovator | Learning, Brainstorming, Kahoot, Flipped classroom | |
| | A3. Integrate the knowledge of biomedical sciences, pharmacokinetics, pharmacodynamics & toxicological principles of the drugs to ensure the safety and efficacy of the medication to improve overall health and awareness. | Natural Medicines, Safety and Efficacy Alternative and Complementary medicine Biochemistry Microbiology & Immunology Clinical Biochemistry Anatomy and Physiology I Anatomy and Physiology II Pathology Medicinal Chemistry I, II and III Pharmacology & Therapeutics-I,II,III ,IV, V Pharmaceutical Care Clinical Toxicology Biopharmaceutics and Pharmacokinetics Applied Pharmacokinetics Pharmacogenomics & Precision Medicine Research Methodology & Biostatistics Hospital Pharmacy Capstone course | -Life -long Learner -Promoter | | |



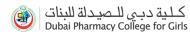
| | A4. Demonstrate specialist and comprehensive knowledge required in providing specialized Clinical services needed in hospital and other clinical environments. | -Professional Skills in Practice Positive Psychology -Green & Sustainable Pharmacy -Pharmaceutical Administration and Pharmacoeconomics -Pharmacology and Pharmacotherapeutics - I, II, III, IV & V -Pharmacy Automation & Informatics -Professional Skills in Pharmacy , -Pharmacy Practice -IPPE -APPE | -Self -aware | | |
|--------|--|--|--|---|--|
| Skills | B1. Design educational strategies for prevention and intervention in disease management for individuals and communities to improve health and wellness | -Alternative and Complementary medicine -Microbiology& Immunology -Pharmacology and Pharmacotherapeutics - I, II, III, IV & V -Pharmacoepidemiology & Pharmacovigilance, -Professional Skills in Pharmacy Practice -IPPE &APPE -Capstone course -Capstone Project -Positive Psychology | -Developer -Innovator | Practical classes, Project Work, Workshops, Case studies, Computer Lab, Role play, Self-directed learning, Method demonstration, | Oral, Scientific Poster, Symposium , OSCEs, practical evaluation, Case-based assessment, Project Report & Capstone Project, Article review, Self-learning assessment, Capstone course assessment, |
| | B2 . Communicate effectively orally and in writing and deploy a range of presentation techniques and strategies to present, explain and assess information within workplace settings. | -Pharmaceutical Organic Chemistry II, - Medicinal Chemistry I, II and III, -Instrumental Analysis -Natural Medicines, Safety and Efficacy - Introduction of Pharmacy -Pharmaceutics-I -Pharmaceutics-II -Pharmaceutical Biotechnology -Biopharmaceutics and Pharmacokinetics -Biochemistry -Clinical Biochemistry -Anatomy and Physiology I -Anatomy and Physiology II -Pharmaceutical Care -Research Methodology & Biostatistics -Capstone course -Professional Skills in Pharmacy Practice -IPPE & APPE -Capstone Project -Elective Courses Area I-IV Medical &Pharmaceutical Terminology and Information Literacy | -Communicator -Problem Solver and decision maker -Patient Advocate for safe and effective medication -Caregiver and provider & medication expert | Field trip. | Project learning by doing |



| Aspect in | B3. Identify problems, analyze, deploy and utilize pertinent information in clinical case discussion and evaluate the patient care process with an appropriate pharmaceutical care pan. | Computer Applications Arabic Language Skills Applied Pharmacokinetics Pharmacy Practice Pharmaceutical Care Natural Medicines, Safety and Efficacy IPPE & APPE Pharmacology and Therapeutics- I, II, III, IV & V Professional Skills in Pharmacy Practice Hospital Pharmacy Pharmacoepidemiology & Pharmacovigilance Calculations in Practice Clinical Toxicology Research Methodology and Biostatistics Capstone course Capstone Project Mathematics and Statistics | -Problem Solver and decision maker -Patient Advocate for safe and effective medication -Caregiver and provider & medication expert | Prescription | Direct | Indirect |
|----------------|--|--|---|--|---|--|
| Competen ce | Demonstrate the leadership ability to be innovative by using creative thinking and take responsibilities to function both independently and as a healthcare team | -Pharmaceutics-II -Pharmaceutical Biotechnology -Pharmaceutical Technology -Natural Medicines, Safety and Efficacy | | evaluation, PBL, Workshops, Role play, Case studies, | PPE evaluation and exam, | Course Level: |
| | member. | -Alternative and Complementary medicine -Pharmacy Practice -Pharmaceutical Care -Professional Skills in Practice -Hospital Pharmacy -Pharmaceutical Administration and Pharmacoeconomics Pharmacy Automation &Informatics -Pharmacoepidemiology & Pharmacovigilance -Research Methodology and Biostatistics -Capstone course -Medicinal Chemistry I, II & III -Instrumental Analysis -Pharmacology and therapeutics I, II, III,IV and V -Pharmacogenomics & Precision Medicine -IPPE and APPE -Innovation and Entrepreneurship | -Leader - Healthcare provider - Interprofession al collaborator -Innovator | Presentation, IPPE, APPE, INT. | OSCEs, Calculations in Practice exam, Presentation, Capstone evaluation, Capstone Project evaluation, Oral presentation, Presentation assessments, | evaluation by IE. 2. Test blueprints. 3.Create a link in LMS for the evaluation of the course. 4. Evaluate the number of students hours spent on learning 5. Evaluate the number of students hours |
| | C2.(Self Development) | - Medicinal Chemistry I, II & III | -Problem solver | | | spent on |
| | Develop self-direction in problem-solving, decision-making, and critical thinking abilities | -Pharmaceutics-I -Pharmaceutics-II -Pharmaceutical Biotechnology | -Lifelong learner, | | | homework |



| for professional development and become | -Pharmaceutical Technology | -Educator and | 6. Focus gr |
|--|--|---------------|---------------|
| independent lifelong learners. | -Biopharmaceutics and Pharmacokinetics | Health and | interview. |
| | -Research Methodology and Biostatistics | wellness | 7.Plagiarism |
| | -Capstone course | -Promoter, | report |
| | -Professional Skills in Pharmacy Practice | -Self-aware | 7.Number of |
| | IPPE & APPE | | prizes won ir |
| | -Capstone project | | DUPHAT |
| | Elective Courses Area III & IV | | 8.Number o |
| | -Medical & Pharmaceutical Terminology and Information Literacy | | Cheating ca |
| | -Islamic Studies | | in Exams |
| | -Innovation and Entrepreneurship | | 9.Number o |
| C3. (Role in Context) | -Introduction of Pharmacy | -Professional | students |
| Exhibit Islamic behavior, moral and ethical | -Pharmacy Practice | and ethical | participating |
| attitudes consistent with the trust given to the | -Pharmacology and Therapeutics- I,II, III, IV& V | -Provider | DUPHAT |
| profession by patients, other health care | -Professional Skills in Practice | Tiovider | |
| providers, and society. | -Research Methodology & Biostatistics | | |
| providers, and society. | -Pharmacy Laws and Drug Regulations | | Program Le |
| C4. Practice Pharmaceutical Care Process in | -Pharmacoepidemiology & Pharmacovigilance | | 1.Employer |
| individualized and population-based care. | -Clinical Toxicology | | alumni surve |
| individualized and population-based care. | -Research Methodology and Biostatistics | | 2.Student |
| | -Capstone course | | perception |
| | -Professional Skills in Pharmacy Practice | | surveys |
| | -IPPE & APPE | | 3.Job placer |
| | -Elective courses: Area I | | ratio. |
| | -Liective courses. Area i | | 4.Graduates |
| | -History of Pharmacy | | completion |
| | -UAE Society | | 5.Annual |
| | | | reports |
| | | | including |
| | | | benchmarks |
| | | | with nati |
| | | | and |
| | | | internationa |
| | | | institution. |
| | | | 6. Preceptor |
| | | | satisfaction |
| | | | survey |
| | | | 7. Faculty- |
| | | | External |



| | | | examiner satisfaction survey 8. Number of students participating in DUPHAT 9.Number of prizes won in DUPHAT. 10. Disciplinary Reports. 11.Graduate destination survey results questionnaire 12. Number of Cheating cases in Exams |
|--|--|--|---|
|--|--|--|---|

Graduate Competencies

List of the expected competencies for graduates of the Bachelor of Pharmacy Program

The Bachelor of Pharmacy (B. Pharm) Program in Dubai Pharmacy College for Girls has adapted the new UAE Pharmacy competencies released by the Commission of Academic Accreditation (CAA), Ministry of Education - Higher Education Affairs, UAE.

The new program in DPCG encompasses with different disciplines of pharmaceutical sciences and clinical sciences. This program provides students with a concrete base of pharmacy knowledge, skills and competencies which make them capable of work in different clinical settings of pharmacy field.



Students graduating from B. Pharm program should be able to ascertain following competencies:

| <u>S.</u> | <u>Graduate</u> <u>Competencies</u> | Description | Course Name | Learning/ Teaching Methods and Strategies | Types/ Methods of assessment | |
|-----------|--|---|--|---|---|--|
| <u>No</u> | | | | | Direct | Indirect |
| 1. | Learner (Learner) | Develop, integrate, and apply knowledge from the foundational sciences (i.e., pharmaceutical, biomedical, social/behavioral/administrative, and clinical sciences) to evaluate the scientific literature, explain drug action and interactions, solve therapeutic problems, and advance population health and patient- centered care. | Alternative and Complementary medicine Natural Medicines, Safety and Efficacy, Pharmaceutical Organic Chemistry I & II Medicinal Chemistry I, II & III Instrumental Analysis Pharmacology and Therapeutics I, II, III, IV & V. Microbiology & immunology; Pharmaceutical Biotechnology, History of Pharmacy, Introduction to pharmacy, Pharmaceutics II, Biopharmaceutics and Pharmacokinetics. Social and behavior aspects in pharmacy. Clinical Toxicology. | Lectures, Tutorials, Practical, Self-Directed Learning, Problem Based Learning, Brainstorming, Kahoot, Case discussions, microlearning, Flipped classroom Role play | Short answer questions; Essay type questions, Multiple Choice questions. Seminar Presentation. Poster, small group presentation Project learning by doing | Student Portfolio Self-reflection of competencies achievement. Couse evaluation by IE. Analysis of course work including report, presentation, posteretc Faculty-External examiner satisfaction survey |



| | | | Pharmaceutics I, GMP, Anatomy and Physiology I &II Biochemistry Clinical Biochemistry Pathology Elective Courses Area I-IV Medical &Pharmaceutical Terminology and Information Literacy - Computer Applications -Positive Psychology -Islamic Studies -History of Pharmacy -UAE Society | | | |
|----|--|--|---|---|--|--|
| 2. | Patient Centered Care (Care Provider) | Provide patient-centered care as the pharmacotherapy expert to diverse patients using the best available evidence and resources, taking into consideration patients', their families, and their caregivers circumstances and beliefs. | Alternative and Complementary medicine Natural Medicines, Safety and Efficacy Medicinal Chemistry I, II & III Pharmacology and Therapeutics I, II, III, IV & V. Pharmaceutical care | Lectures, Tutorials, Practical, Self-Directed Learning, Problem Based Learning, Case discussions, Brainstorming, Kahoot, Demonstration, Portfolio, | Short answer questions; Essay type questions, Multiple Choice questions. Capstone course assessment Case presentation assessment OSCE | Student Portfolio Self reflection of competencies achievement. Couse evaluation by IE. Preceptors' satisfaction survey |



| | | | Professional Skills in Pharmacy Practice IPPE 01, 02 APPE Social and behavior aspects in pharmacy, Pharmacogenomic s; Clinical Toxicology Capstone course Clinical Biochemistry Positive Psychology | Experiential Education Role play | APPE- Competency evaluation form Project learning by doing, Preceptors' evaluation | |
|----|---|---|---|--|---|--|
| 3. | Medication Use Systems Management (Manager) | Manage patient healthcare needs using human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems. | Natural Medicines, Safety and Efficacy IPPE 01, 02 APPE Pharmacogenomic s, Pharmaceutical Biotechnology; Clinical Toxicology, Pharmaceutical Technology. Hospital Pharmacy Pharmacy Automation and Informatics Pharmacoepidemi ology & Pharmacovigilance Pharmacy practice | Lectures, Tutorials, Practical, Self-Directed Learning, Problem Based Learning, Brainstorming, Kahoot, Experiential Education Field trip. | Short answer questions; Essay type questions, Multiple Choice questions. Seminar Presentation. IPPE 02 APPE- Competency evaluation form Preceptors' evaluation | Student Portfolio Self reflection of competencies achievement. Couse evaluation by IE. Preceptors' satisfaction survey |



| 4. | Health and Wellness Promotion (Promoter) | Develop prevention, screening, intervention, and educational strategies for individuals and communities to maintain and improve health and wellness and to manage chronic diseases. | -Green & Sustainable Pharmacy Professional Skills in Practice. Pharmacology and Therapeutics I, II, III, IV & V. IPPE 01, 02 APPE | Lectures, Practical, Problem Based Learning, Case presentations, Self-Directed learning, | IPPE 01 APPE- Competency evaluation form Presentation evaluation OSCE, | Student Portfolio Self reflection of competencies achievement Preceptors' satisfaction survey |
|----|---|---|--|--|--|---|
| | | | Biopharmaceutics and Pharmacokinetics. Social and behavior aspects in pharmacy; Clinical Toxicology, Pharmacy practice | Experiential Education Role play | Preceptors' evaluation | Health awareness campaigns |
| 5. | Ethical decision Making and Problem Solving (Problem Solver) | Identify problems; explore and prioritize potential strategies and design, implement, and evaluate a viable solution. | Natural Medicines, Safety and Efficacy Capstone course- Professional Skills in Pharmacy Practice, Pharmacology and Therapeutics I, II, III, IV & V. IPPE 01, 02 APPE Clinical Toxicology Capstone course Pharmacy Law Pharmacy Automation and Informatics Pharmacy practice | Lectures, Tutorials, Practical, Self-Directed Learning, Problem Based Learning, Brainstorming, Kahoot, Demonstration, Portfolio, Experiential Education Case study Role play | Capstone course- assessment, PBL assessment OSCE APPE- Competency evaluation form Project Report, Preceptors' evaluation | Student Portfolio Self-reflection of competencies achievement Preceptors' satisfaction survey |



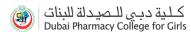
| | | | -Innovation and Entrepreneurship | | | |
|----|---|--|---|---|---|---|
| 6. | Educator (Educator) | Educate all healthcare providers, patients, and general population by determining most effective and enduring way to impart knowledge and assess understanding. | Professional Skills in Pharmacy Practice, Pharmacology and Therapeutics I, II, III, IV & V. IPPE 01, 02 APPE Clinical Toxicology Pharmacoepidemi ology & Pharmacoepidemi ology & Pharmacovigilance Pharmacovigilance Pharmacoutical Terminology and Information Literacy - Arabic Language Skills | Demonstration, Portfolio, Experiential Education Lectures, Practical, Problem Based Learning, Case presentations, Self-Directed learning, Role play | OSCE APPE-Mid and end Competency evaluation form, Preceptors' evaluation | Student Portfolio Self reflection of competencies achievement Preceptors' satisfaction survey Health awareness campaigns Employer or alumni surveys |
| 7. | Patient Advocacy (Advocate) | Assure that patients' best interests are represented and consider patient experience. | Professional Skills in Pharmacy Practice, Pharmaceutical care IPPE 01, O2 APPE | Demonstrations, Case presentations, Portfolio, Experiential Education Role play | OSCE APPE- Competency evaluation form, Preceptors' evaluation | Student Portfolio Self reflection of competencies achievement, Health awareness campaigns |
| 8. | Inter & Intra Professional Collaboration (Collaborator) | Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs. | Professional Skills in Pharmacy Practice, Pharmaceutical care IPPE 01, 02, INT | Case presentations, Demonstration, Portfolio, Experiential Education Role play | OSCE APPE- Competency evaluation form Preceptors' evaluation | Student Portfolio Self reflection of competencies achievement Number of students |



| | | | APPE Social and behavior aspects in pharmacy. | | | participating in IPSF, Health awareness campaigns |
|-----|------------------------------------|--|---|--|--|---|
| 9. | Cultural Sensitivity (Includer) | Recognize the social determinants of health and traditional compassion to avoid bias and inequities in access to quality care | Professional Skills in Practice, Pharmacy Practice, IPPE 01, 02 APPE Social and behavior aspects in pharmacy. Pharmaceutical Care Elective courses: Area I Islamic Studies | Demonstration, Portfolio, Experiential Education Role play | OSCE APPE- Competency evaluation form Preceptors' evaluation | Student Portfolio Self reflection of competencies achievement |
| 10. | Communication (Communicator) | Effectively communicate orally and in written by identifying verbal and nonverbal ques when interacting with patients and healthcare providers. | Alternative and Complementary medicine Natural Medicines, Safety and Efficacy Professional Skills in Pharmacy Practice, IPPE 01, 02 APPE Social and behavior aspects in pharmacy, Capstone course Capstone project Elective courses: Area I Medical &Pharmaceutical | Practical, Self-Directed Learning, Problem Based Learning, Seminar Presentations, Kahoot, Experiential Education Role play | OSCE APPE- Competency evaluation form Oral Exam, Oral presentation evaluation, Questions and answers during the lectures or labs. Preceptors' evaluation Capstone project evaluation forms Project Report, | Student Portfolio Self reflection of competencies achievement External evaluation External evaluator in conferences |



| | | | Terminology and Information Literacy - Computer Applications - Arabic Language Skills | | | |
|-----|---|--|---|---|---|---|
| 11. | Professional Statistics & calculations (Calculator) | Perform precise calculations in pharmacy practice and interpretation of statistical data processing and evaluation. | Research Methodology and Biostatistics Capstone Project, Mathematics and Statistics. Calculation in practice | Lectures, Tutorials, Practical, Problem Based Learning, Demonstration, | Short answer questions; Essay type questions, Multiple Choice questions. Capstone project evaluation forms | External examiner evaluation |
| 12. | Self-Awareness (Self-Aware) | Examine and reflect on personal knowledge, skills, abilities, beliefs, biases, motivation, and emotions that could enhance or limit personal and professional growth. | Professional Skills in Pharmacy Practice, Pharmaceutical care IPPE 01, 02 APPE Social and behavior aspects in pharmacy. INT Positive Psychology | Seminar Presentations, Demonstration, Portfolio, Experiential Education | Seminar presentations assessment , Case presentations evaluation, mid and end competencies Preceptor Evaluation, | Student Portfolio Self reflection of competencies achievement |
| 13. | Leadership & Management (Leader) | Demonstrate responsibility for creating and achieving shared goals, regardless of position, and able to effectively manage resources, information and participate in organizational planning | IPPE 01, 02 APPE , INT Pharmacy administration and Pharmacoeconomi cs | Workshop presentations, Demonstration, Portfolio, Experiential Education | presentations assessment, Case presentations evaluation, mid and end competencies | Student Portfolio Self reflection of competencies achievement Extracurricular activities by IPSF |



| | | | Pharmacoepidemi ology & & Pharmacovigilance | | Preceptor Evaluation, | |
|-----|--|---|--|---|--|--|
| 14. | Innovation and Entrepreneurship (Innovator) | Engage in innovative and entrepreneurial activities by using creative thinking to envision better and productive ways of accomplishing professional goals. | Research Methodology and Biostatistics Pharmacy administration and Pharmacoeconomi cs Capstone Project IPPE01,02 Pharmaceutics II, Pharmaceutical Technology -Innovation and Entrepreneurship | Workshop Presentations, Demonstration, Portfolio, Experiential Education Workshop Certified course | Capstone project evaluation forms presentations assessment, Case presentations evaluation Preceptor Evaluation, | Student Portfolio Self reflection of competencies achievement |
| 15. | Professionalism and Ethical Practice (Professional) | Exhibit behaviors and values consistent with the trust given to the profession by patients, other healthcare providers, and society. | Professional Skills in Pharmacy Practice, Pharmaceutical care IPPE 01, 02 APPE Social and behavior aspects in pharmacy. Islamic Studies | Workshop Presentations, Demonstration, Portfolio, Experiential Education Role play | OSCE APPE- Competency evaluation form presentations evaluation, Case presentations evaluation, Preceptor Evaluation, | Student Portfolio Self reflection of competencies achievement Plagiarism Cheating in exam |
| 16. | Research & Scholarship (Scholar) | Engage in research and scholarly activities related to the healthcare and pharmaceutical practice. | Research Methodology and Biostatistics Capstone Project IPPE 01, 02 APPE Pharmacy practice | Experiential Education Capstone Project evaluation | No. of student publications from Capstone project. No. of students in conference presentation. | Student perception surveys Employer or alumni surveys No. of winner in DUPHAT |





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% |
| Total | 57 | 160 | 100% |

| 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% |
| Total | 39 | 104 | 100% |



| | | 6.A. Distribution of | of Courses | | | | |
|-----------------|--------|--|--------------|-------------|---------|-----------|--------------------|
| | | Academic Year 202 | 2-2023 | | | | |
| | | FIRST YEAR | | | | | |
| | | Fall Semeste | r | | | | |
| 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 & Pharmaceutical Terminology and Information Literacy | - | GE703 | 3 | - | 3 |
| GE703 | GE | Computer Applications | - | GE702 | - | 2 | 2 |
| GE704 | GE | Islamic Studies | - | _ | 2 | - | 2 |
| GE705 | GE | History of Pharmacy | - | - | 1 | - | 1 |
| PC701 | PS | Introduction to Pharmacy | - | - | 1 | - | 1 |
| | | TOTAL | - | - | 13 | 2 | 15 |
| | | Spring Semest | er | • | | | |
| 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 | GE705 | - | 2 | - | 2 |
| GE706 | GE | Positive Psychology | - | - | 2 | - | 2 |
| GE707 | GE | Green & Sustainable Pharmacy | - | - | 2 | - | 2 |
| PC702 | PS | Pharmaceutics-I | PC701 | | 3 | 1 | 4 |
| MC702 | BBS | Anatomy and Physiology-II | MC701 | - | 2 | 1 | 3 |
| | | TOTAL | - | - | 13 | 3 | 16 |
| Summer Semester | | | | | | | |
| Code | Domain | Courses | Prerequisite | Corequisite | Lecture | Practical | Total Units |
| GE708 | GE | Arabic Language Skills | | - | 2 | - | 2 |
| GE709 | GE | UAE Society | | - | 2 | - | 2 |
| EC7011/ EC7012 | EC | Elective Area I | | - | 2 | | 2 |
| | | Total | | | 6 | - | 6 |

| | | Academic Ye | ar 2023-2024 | | | | |
|---------|-------------|---|--------------------|---------------|---------|-------------|-------------|
| | SECOND YEAR | | | | | | |
| | | Fall Se | mester | | | | |
| 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 |
| | | TOTAL | | | 14 | 3 | 17 |
| | | 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 |
| | | TOTAL | | | 13 | 4 | 17 |
| | | Introductory Professional Practic | e Experience (Sumn | ner Semester) | | | |
| Code | Domain | | No of Hours | | No of C | redit Hours | ; |
| IPPE-01 | CS | Introductory Professional Practice Experience | 200 | | | 5 | |



| | | | Academic Year 2024-20 | 025 | | | |
|---------------|--------|--|-------------------------|----------------|---------|--------------|--------------------|
| | | | 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 |
| GE710 | GE | Innovation and Entrepreneurship | - | | 2 | - | 2 |
| | | TOTAL | | | 13 | 2 | 15 |
| | | Professional | Practice Experience (Su | mmer Semester) | | | |
| Code | Domain | | No of H | ours | No | of Credit Ho | urs |
| IPPE-02 | CS | Introductory Professional Practice Experience-Health care setting | 120 | | | 3 | |
| (INTR) | PS | Industrial Training | 40 | | | 1 | |

| | | Academic Yea | | | | | | |
|-------------------|-------------|---|---|-------------|---------|-----------|-------------|--|
| | 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/EC 7032 | EC | Elective Area III | | | 2 | | 2 | |
| | | TOTAL | | • | 14 | 2 | 16 | |
| | | Spring S | emester | | | | • • | |
| 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/EC 7042 | EC | Elective area IV | | | 2 | | 2 | |
| | | TOTAL | | | 9 | 6 | 15 | |

| | Advanced Professional Practice Experience (Fall semester) 2026-2027 | | | | | | |
|--|---|--|--|--|--|--|--|
| 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 & Pharmaceutical Terminology and Information | 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 | |
| Green & Sustainable Pharmacy | 2 | Pharmaceutical Biotechnology | 2 | |
| UAE Society | 2 | Biopharmaceutics and Pharmacokinetic | 3 | |
| Innovation and Entrepreneurship | 2 | Pharmaceutical Technology | 3 | |
| Basic Biomedical Sciences (BBS) | 13 | Introduction to Pharmacy | 1 | |
| Anatomy and Physiology- I | 2 | Clinical Sciences (CS) | 57 | |
| 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 | |
| Professional Practice Experience (PPE) | 25 | 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 | |
| Electives (EC)* | 8 | 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 | |
| Area I | | Biostatistics | 1 | |
| EC7011 - Organizational Behavior and Cultural Diversity | | Professional Skills in Practice | 3 | |
| EC7012- Emotional Intelligence and Leadership | | Hospital Pharmacy | 2 | |
| Area II | | Pharmacy Laws and Drug Regulations | | |
| EC7021 - Nuclear Pharmacy | | Pharmacoepidemiology & Pharmacovigilance Pharmacology | | |
| EC7022 -Pharmacognosy and Phytochemistry | | Pharmacology and Therapeutics-V | 3 | |
| Area III | | Pharmaceutical Administration and Pharmacoeconomics | 2 | |
| EC7031 -Regulatory affairs | | Pharmacy Automation & Informatics | 2 | |
| EC7032 - Pharmaceuticals GMP | | Capstone course | 2 | |
| Area IV | | Calculation in Practice | 2 | |
| EC7041 -Nutrition and Health | | Capstone Project (CS) | 2 | |
| EC7042 - Bioassay and Screening in Drug Development | | Capstone Project (CS) | 2 | |



| 8. Course I | Description | | | |
|---|---|---|--|--|
| GENERAL EDUCATION | | | | |
| Mathematics and Statistics | Course Code: GE701 | Credit Hours: 2+0 | | |
| The course will introduce basic mathematical concepts pharmaceutical and clinical calculations. The course in through the development of mathematical techniques will be equipped with the skills needed to apply ma concepts will be introduced helping students to unders types, analysis of data and sampling techniques. | ncludes introduction of cr such as measurement syste thematical techniques co | itical mathematical concepts ems and logarithms. Students rrectly. Moreover, statistical | | |
| Medical &Pharmaceutical Terminology and Information | Course Code: GE702 | Credit Hours: 2+1 | | |
| Literacy | | | | |
| Medical & pharmaceutical Terminology is the study of a Students receive a thorough grounding in basic Medica root words, prefixes, suffixes, and abbreviations. The st abbreviations and use of medical & pharmaceutical ter to have a basic comprehension of medical & pharmace the peers in the field. The course is also designed to en and synthesize information rather than merely memori development of their critical thinking skill to solve prob scientific and practical problems of their academic, nor | I & pharmaceutical termin audy also focuses on correct ms. By the end of this cour utical terms and be able to able students skillfully ana zing and repeating it. This lems, make decisions, and | ology through a study of ct pronunciation, spelling, se learners will be expected o communicate accurately to lyze, evaluate, access, apply would help in the deal effectively with social, | | |
| making students lifelong learners. | | | | |
| Computer Applications | Course Code:: GE703 | Credit Hours: 0+2 | | |
| referencing methods, presentation skills using MS. office app and reinforcing skills that help them to demonstrate the resp safety issues in using electronic media. Islamic Studies | - | | | |
| This Islamic studies course aims to give the students a comp Legislation: Holy Qur'an and sunnah (Prophet Mohamed Hadit an explanation of selected Qur'anic verses, the definition of Sur study sections of the biography of the prophet (PBUH), and their differences, with an indication of the most important sour | h). This course deals with the onnah with an explanation of se the definition of schools of ju | definition of the Holy Qur'an with lected Prophet's sayings (Hadith), irisprudence and the reasons for | | |
| History of Pharmacy | Course Code: GE705 | Credit Hours: 1+0 | | |
| This course introduces the student to the profession of pharm systems, it gives a preview of the history of pharmacy and the ancient people and cultures to the evolution of the profession standards in which the profession of pharmacy operates. | different historical Eras, the in Also, it describes the legislat | nportant contributions of the tive, ethical, and professional | | |
| Positive Psychology | Course Code: GE706 | Credit Hours: 2+0 | | |
| The proposed course aims at enriching the students in Psychology concentrating on optimal human function and more successful, and relationship between psychology through Increase positive emotions, Develop More goals building skills needs to be a way of life. Creat life and coping through practicing mindfulness. It all types that related to happiness and the relationship | oning what makes people chological wellbeing and e Resilience of Being Pre- tes personal growth ider so introduces students to between happiness, hum | e happier, more productive, an able to Build happiness epared to Set priorities and ntifying sources of stress in the personality, personality nan connections, and social | | |
| qualities, such as compassion, cooperation, mindfu of well-being, optimism and emotional intelligence in any society. In the course, students will have the | that facilitates the devel | opment of human resource | | |

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.

Green & Sustainable Pharmacy Course Code: GE707 Credit Hours: 2+0 The course is designed to introduce the Importance of green and sustainable pharmacy practice. The course is equipping pharmacy students with the knowledge, skills and attributes needed to work and live in a way that safeguards environmental wellbeing, both in the present and for future generations. Educating pharmacy students on how to work sustainably in their future careers will increase awareness of climate change and allow for effective mitigation strategies in the profession.

| Arabic Language Skills | Course Code: GE708 | Credit Hours: 2+0 | | |
|--|--|-------------------------------|--|--|
| The course provides the students to acquire basic language skills (e.g., grammar, eloquence, and spelling) and pay attention | | | | |
| to linguistic methods, and correct mistakes. The purpose of the | e course is to achieve advance | d language proficiency in the | | |
| four areas of language performance: speaking, listening, readir | four areas of language performance: speaking, listening, reading, and writing. The course will pursue work in one of two | | | |
| academic disciplines: literature or linguistics to enhance communicative skills and intellectual background necessary for a | | | | |
| meaningful engagement with the Arab world and its cultural and intellectual traditions | | | | |
| UAE Society | Course Code: GE709 | Credit Hours: 2+0 | | |

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.

| Innovation and Entrepreneurship | Course Code: GE710 | Credit Hours: 2+0 |
|---|--------------------------------------|-------------------------------|
| This languation and Entropy supplie accurs for uses on the in | towards a stinue la structure autors | المصحية مانيا متعالج المتعالم |

This Innovation and Entrepreneurship course focuses on the interconnection between entrepreneurial thinking and innovation. Entrepreneurship education prepares students to identify and address challenges and opportunities. 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. It addresses critical areas for successful growth, including design thinking, open innovation, business models, product-market fit, and financing. This course will teach, how to think like an entrepreneur and provides the models, tools and frameworks to further develop business or idea. An emphasis will be placed on the pharmaceutical industry.

General Education/ Clinical Sciences (GE/CS)

Course Code: CP709 Credit Hours:1+1

Research Methodology& Biostatistics 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 | | | | |
|--|--------------------|-------------------|--|--|
| Anatomy and Physiology-I | Course Code: MC701 | Credit Hours: 2+0 | | |
| 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. | | | | |
| Anatomy and Physiology-II | Course Code: MC702 | Credit Hours: 2+1 | | |
| 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. | | | | |
| Biochemistry | Course Code: MC703 | Credit Hours: 2+0 | | |

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.

Microbiology & ImmunologyCourse Code: MC704Credit Hours: 3+1The 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.

| Pathology | Course Code: MC705 | Credit Hours: 2+0 |
|---|-------------------------------|-----------------------------|
| The course provides the students with the basic knowledge a | nd conceptual understanding | of the pathology of various |
| diseases. Thus the student will be familiar with the names, class | ssification, pathogenesis and | pathological changes in the |
| various body tissues in different diseases. | | |

| PHARMACEUTIC | CAL SCIENCES (PS) | |
|---|--|---|
| Pharmaceutical Organic Chemistry- I | Course Code: PN701 | Credit Hours: 2+0 |
| This course describes the structure of atoms, atomic orbital, h and its relationship with the electronegativity of the element. heterolytic bond cleavages in a chemical reaction, production the resonance structure, substituents effect on the resonance organic molecules. | It also covers the reaction mechanis of free radicals and their stability. T | m involves homolytic and his course also describes |
| Pharmaceutical Organic Chemistry- II | Course Code: PN702 | Credit Hours: 2+1 |
| This course describes the structural configuration, nomenclat reactions/reaction mechanism of different functional groups hydrocarbons, polynuclear hydrocarbons, esters, ethers, thioe diazonium salts and heterocyclic compounds. Laboratories in molecules and preparation of selected organic compounds, t | as an aliphatic, aromatic hydrocarbo ethers, alcohols, carboxylic acids, alde clude identification of functional gro | n, substituted ehydes, ketones, amines, ups of different organic |
| Medicinal Chemistry-I | Course Code: PN703 | Credit Hours: 3+0 |
| Medicinal chemistry is the application of chemistry in the cor physiochemical, stereo-chemical aspects of drug action and b This course also describes the chemistry of pharmacophore a that affecting the cardiovascular system (cardiac glycosides, a anticoagulants, antiplatelets, and diuretics), cholinergic, adrer system. In this course, a student will gain knowledge about h receptor interactions/biological activity and metabolism. Stud synthesis of different classes of medicinal agents. | biotransformation chemical reactions and structure-activity relationship of s antianginal, antiarrhythmic and antilip nergic neurotransmission, and stimul ow the structure of a drug relates to | s of phase I and phases II. several classes of drugs pidemic agents, ating central nervous its intermolecular drug- |
| Medicinal Chemistry-II | Course Code: PN704 | Credit Hours: 2+1 |
| This course describes the medicinal chemistry of centrally act inflammatory agents analgesic-antipyretics, sedatives-hypnot drugs, antiparkinsonian and skeletal muscle relaxant. It also d anaesthetics. In this course student will gain knowledge about properties, intermolecular drug-receptor interactions lead to gain knowledge and skills about drug designing, synthesis ar | tics, antiepileptics, general anaesthet lescribes the drugs that affect neuror it how the structure of a drug relates pharmacological activity and metabo | ics, psychotherapeutic nal transmission as local to its physicochemical olism. Students will also |
| Medicinal Chemistry–III | Course Code: PN705 | Credit Hours: 3+0 |

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.

| interaction leads to biological activity and pharmacolo Instrumental Analysis | gical-clinical uses. Course Code: PN706 | Credit Hours: 2+1 |
|---|---|-----------------------------------|
| This course is an introduction to modern instrumental | | |
| theory of operation, instrument design and methodol | | |
| Fluorescence, FTIR, AAS, MS, and NMR, and chromato | | • |
| | | |
| Laboratory includes the application of instruments in t Introduction to Pharmacy | PC701 | Credit Hours: 1+0 |
| This course introduces basic concepts in pharmaceutic | | |
| administration, prescription, labelling of medications a | 5 5 | 5 |
| extemporaneous dispensing and the fundamentals in | • | |
| Pharmaceutics-I | Course Code: PC702 | Credit Hours: 3+1 |
| The course is designed to provide the students with | | |
| C . | | |
| forms concerning their advantages and limitations, ty | | |
| strategies, and final product packaging and stability. T | | |
| solutions, suspensions, emulsions, and sterile parenter | | |
| calculations required in the formulation of the menti | oned dosage forms are also discusse | ed. Besides, students are initial |
| exposed to modern formulation technology and innov | vations in pharmaceutical dosage form | ns and drug delivery systems. |
| Pharmaceutics-II | Course Code: PC703 | Credit Hours: 3+1 |
| This course is designed to cover different pharmaceu | | |
| | | |
| the production of finished pharmaceuticals. It includes | | |
| Furthermore, the course discusses topics related to soli | | • |
| manufacturing methods, machinery and evaluation of t | | |
| dosage forms and some advanced nanoparticles. The L | ab component of this course is design | ned to provide extensive practic |
| exposure in development & evaluation of such dosage | e forms. | |
| Biopharmaceutics and Pharmacokinetics | Course Code: PC704 | Credit Hours: 3+0 |
| The major focus in biopharmaceutics will be concentra | | |
| performance in the body during the processes of liber | | |
| of evaluation of drug delivery systems, and the therap | • | |
| course provides a conceptual and quantitative backgro | u | |
| advanced studies in clinical pharmacokinetics. | | |
| Pharmaceutical Technology | Course Code: PC705 | Credit Hours: 2+1 |
| The course is designed to provide students with prope | er knowledge in various aspects in the | pharmaceutical technology |
| ncluding pre-formulation studies of solid dosage form | | |
| Packaging technology and its effect on medicine safet | | |
| course also focuses on the development of new drug | | |
| and microspheres | | |
| Pharmaceutical Biotechnology | Course Code: PC706 | Credit Hours: 2+0 |
| This course delivers up-to-date information a | about different biotechnologica | l processes (Recombinant |
| DNA, enzyme, hybridoma, and fermentation | | |
| proteins, peptides, vaccines (DNA and RNA | | |
| | | |
| issues related to the development and deliver | y of these stable blotechnologi | cal products in numans |

CLINICAL SCIENCES (CS)

| Social and Behavior Aspects in Pharmacy | Course Code: CP701 | Credit Hours: 2+0 | | |
|--|---|---|--|--|
| The course introduces sociological, psychological, and beh | navioural aspects of pharmacy p | ractice regarding patients' | | |
| perspectives of health and illness, as well as their implication | ons for pharmacists' roles. Varia | bility in patients' individual needs | | |
| and relationships with health care providers. It brings more knowledge of human behaviour to the students. It provides | | | | |
| mproved ways and means for students to learn about the | nature of the multiple factors: s | ocial, culture & psychological, | | |
| which affect the maintenance of health and the prevention | n of disease and disability. This v | vill help in promoting health, | | |
| preventing illness, restoring health and alleviating suffering | g. | | | |
| Pharmacology & Therapeutics-I | Course Code: CP702 | Credit Hours: 3+1 | | |
| The course provides knowledge of basic principles of phar | macokinetics and pharmacodyn | namics of medications and their | | |
| therapeutic application. An in-depth discussion of concept | ts of importance in pharmacolog | gy is emphasized. The principles of | | |
| the drugs affecting autonomic nervous system are discuss | ed. Autacoids and anti-inflamma | atory medications (NSAIDs & | | |
| Corticosteroids) are also covered. In addition, the course p | provides the clinical characteristic | cs of peptic ulcer and inflammatory | | |
| bowel disease. Finally, the pharmacologic benefits of medi | ications in each disease, the mar | nagement guidelines, treatment | | |
| algorithms, and patient educations of the studied disorder | | | | |
| Clinical Biochemistry | Course Code: CP703 | Credit Hours: 2+1 | | |
| The course provides to the pharmacy students the knowled | | | | |
| different biomolecules and related clinical correlations in a | | etabolic reactions in different | | |
| human tissues and different physiological and pathologica | | | | |
| Pharmacology and Therapeutics-II | Course Code: CP704 | Credit Hours: 3+1 | | |
| The course deals with the principles of the common cardic | ovascular diseases describing the | e causes of hypertension, the major | | |
| determinants which control coronary blood flow, and the e | atialagy of baset failure. Then the | ne course provides the clinical | | |
| determinants which control coronary blood now, and the e | ellology of heart failure. Then, tr | ie course provides the childen | | |
| - | | - | | |
| characteristics (mechanism of action, benefits, adverse effe | ects, interactions, and contraindi | ications) of beta blockers, α -blocke | | |
| characteristics (mechanism of action, benefits, adverse effe diuretics, vasodilators, calcium channel blockers, nitrates, A | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac gly | cations) of beta blockers, α -blocker cosides and antiarrhythmics. Finally | | |
| characteristics (mechanism of action, benefits, adverse effe diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glye | cations) of beta blockers, α -blocke cosides and antiarrhythmics. Finally | | |
| characteristics (mechanism of action, benefits, adverse effe diuretics, vasodilators, calcium channel blockers, nitrates, A | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glye | cations) of beta blockers, α -blocker cosides and antiarrhythmics. Finally | | |
| characteristics (mechanism of action, benefits, adverse effe diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glye | cations) of beta blockers, α -blocke cosides and antiarrhythmics. Finally | | |
| characteristics (mechanism of action, benefits, adverse effe diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glyo e, the management guidelines, to Course Code: CP705 | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 | | |
| characteristics (mechanism of action, benefits, adverse effe diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glyd e, the management guidelines, t Course Code: CP705 macy practice. It covers the know | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can | | |
| characteristics (mechanism of action, benefits, adverse effe diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glyd e, the management guidelines, the Course Code: CP705 macy practice. It covers the know ptoms, diagnosis, treatment, ma | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. | | |
| characteristics (mechanism of action, benefits, adverse effe diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glyd e, the management guidelines, the Course Code: CP705 macy practice. It covers the know ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical | | |
| characteristics (mechanism of action, benefits, adverse effe diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental | ACE inhibitors, ARBs, cardiac glya e, the management guidelines, tr Course Code: CP705 macy practice. It covers the know ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications I care, ears, eyes, nose and throa | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain | | |
| characteristics (mechanism of action, benefits, adverse effective diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health | ACE inhibitors, ARBs, cardiac glya e, the management guidelines, tr Course Code: CP705 macy practice. It covers the kno ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications I care, ears, eyes, nose and throa h, children's care, and smoking o | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also | | |
| characteristics (mechanism of action, benefits, adverse effective diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills | ACE inhibitors, ARBs, cardiac glya e, the management guidelines, tr Course Code: CP705 macy practice. It covers the kno ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications I care, ears, eyes, nose and throa h, children's care, and smoking o | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also | | |
| characteristics (mechanism of action, benefits, adverse effective diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacy settings during an OTC therapeutic dialogue. | ACE inhibitors, ARBs, cardiac glya e, the management guidelines, tr Course Code: CP705 macy practice. It covers the kno ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications I care, ears, eyes, nose and throa h, children's care, and smoking o | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also | | |
| characteristics (mechanism of action, benefits, adverse effective diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of pharmoce managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacy settings during an OTC therapeutic dialogue. Pharmacology and Therapeutics-III | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glyd e, the management guidelines, the macy practice. It covers the know ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications I care, ears, eyes, nose and throat h, children's care, and smoking of s needed to deal with patients in Course Code: CP706 | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also in the hospital and community Credit Hours: 3+1 | | |
| characteristics (mechanism of action, benefits, adverse effective diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of pharmoe managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills oharmacy settings during an OTC therapeutic dialogue. Pharmacology and Therapeutics-III This course is designed to provide students with broad un | ACE inhibitors, ARBs, cardiac glya e, the management guidelines, the manage | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also in the hospital and community Credit Hours: 3+1 system pharmacology in addition t | | |
| characteristics (mechanism of action, benefits, adverse effective diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of pharmace by the pharmacist concerning aetiology, sym, Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills oharmacy settings during an OTC therapeutic dialogue. Pharmacology and Therapeutics-III This course is designed to provide students with broad un the pharmacology, pathophysiology, clinical pharmacoki | ACE inhibitors, ARBs, cardiac glyd e, the management guidelines, the course Code: CP705 macy practice. It covers the know ptoms, diagnosis, treatment, mar-the-counter (OTC) medications I care, ears, eyes, nose and throat h, children's care, and smoking of s needed to deal with patients in the course Code: CP706 Course Code: CP706 derstanding of central nervous sinetic and pharmacotherapy in | cations) of beta blockers, α-blocker cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also in the hospital and community Credit Hours: 3+1 system pharmacology in addition t major area of endocrinology wit | | |
| characteristics (mechanism of action, benefits, adverse effective diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of pharmace be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacy settings during an OTC therapeutic dialogue. Pharmacology and Therapeutics-III This course is designed to provide students with broad un the pharmacology, pathophysiology, clinical pharmacoki special emphasis on the thyroid disorders. The course incompared to provide the student with the pharmacology of the student such as the pharmacology. | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glyd e, the management guidelines, the macy practice. It covers the know ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications I care, ears, eyes, nose and throat h, children's care, and smoking of s needed to deal with patients in Course Code: CP706 derstanding of central nervous s inetic and pharmacotherapy in cludes practical classes using ca | cations) of beta blockers, α-blocker cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also in the hospital and community Credit Hours: 3+1 system pharmacology in addition t major area of endocrinology wit se-based approaches related to th | | |
| characteristics (mechanism of action, benefits, adverse effect diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacology and Therapeutics-III This course is designed to provide students with broad un the pharmacology, pathophysiology, clinical pharmacoki special emphasis on the thyroid disorders. The course inc topics of this course. The course will be taught concurrent | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glyd e, the management guidelines, the macy practice. It covers the know ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications I care, ears, eyes, nose and throat h, children's care, and smoking of s needed to deal with patients in Course Code: CP706 derstanding of central nervous s inetic and pharmacotherapy in cludes practical classes using ca | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also in the hospital and community Credit Hours: 3+1 system pharmacology in addition to major area of endocrinology wit se-based approaches related to th | | |
| characteristics (mechanism of action, benefits, adverse effect diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacology and Therapeutics-III This course is designed to provide students with broad un the pharmacology, pathophysiology, clinical pharmacoki special emphasis on the thyroid disorders. The course inc topics of this course. The course will be taught concurrent | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glyd e, the management guidelines, the macy practice. It covers the know ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications I care, ears, eyes, nose and throat h, children's care, and smoking of s needed to deal with patients in Course Code: CP706 derstanding of central nervous s inetic and pharmacotherapy in cludes practical classes using ca | cations) of beta blockers, α-blocker cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also in the hospital and community Credit Hours: 3+1 system pharmacology in addition t major area of endocrinology wit se-based approaches related to th | | |
| characteristics (mechanism of action, benefits, adverse effect diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacology and Therapeutics-III This course is designed to provide students with broad un the pharmacology, pathophysiology, clinical pharmacoki special emphasis on the thyroid disorders. The course inc topics of this course. The course will be taught concurrent integrated knowledge. | ects, interactions, and contraindi ACE inhibitors, ARBs, cardiac glyd e, the management guidelines, the macy practice. It covers the know ptoms, diagnosis, treatment, ma r-the-counter (OTC) medications I care, ears, eyes, nose and throat h, children's care, and smoking of s needed to deal with patients in Course Code: CP706 derstanding of central nervous s inetic and pharmacotherapy in cludes practical classes using ca | cations) of beta blockers, α-blocke cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also in the hospital and community Credit Hours: 3+1 system pharmacology in addition to major area of endocrinology wit se-based approaches related to th | | |
| characteristics (mechanism of action, benefits, adverse effect diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacology and Therapeutics-IIII This course is designed to provide students with broad un the pharmacology, pathophysiology, clinical pharmacoki special emphasis on the thyroid disorders. The course inc topics of this course. The course will be taught concurrent integrated knowledge. Applied Pharmacokinetics | ACE inhibitors, ARBs, cardiac glya a, the management guidelines, the course Code: CP705 macy practice. It covers the known ptoms, diagnosis, treatment, mar-the-counter (OTC) medications I care, ears, eyes, nose and throach, children's care, and smoking of a sneeded to deal with patients in the course Code: CP706 I cares and pharmacotherapy in cludes practical classes using cardina thy with Applied Pharmacokinet Course Code: CP707 | cations) of beta blockers, α-blocker cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also in the hospital and community Credit Hours: 3+1 system pharmacology in addition t major area of endocrinology wit se-based approaches related to the ics to offer the maximum benefit of Credit Hours: 2+0 | | |
| characteristics (mechanism of action, benefits, adverse effect diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacology and Therapeutics-III This course is designed to provide students with broad un the pharmacology, pathophysiology, clinical pharmacoki special emphasis on the thyroid disorders. The course inc topics of this course. The course will be taught concurrent integrated knowledge. The course deals with the concepts of the clinical pharmaco | ACE inhibitors, ARBs, cardiac glyd a CE inhibitors, ARBs, cardiac glyd e, the management guidelines, the Course Code: CP705 macy practice. It covers the known ptoms, diagnosis, treatment, mac r-the-counter (OTC) medications I care, ears, eyes, nose and throac h, children's care, and smoking of s needed to deal with patients in Course Code: CP706 inetic and pharmacotherapy in cludes practical classes using ca tly with Applied Pharmacokinet Course Code: CP707 cokinetics of certain drugs and c | cations) of beta blockers, α-blocker cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. Is used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also In the hospital and community Credit Hours: 3+1 system pharmacology in addition t major area of endocrinology with se-based approaches related to the ics to offer the maximum benefit of Credit Hours: 2+0 alculation of doses of drugs during | | |
| characteristics (mechanism of action, benefits, adverse effective diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of pharmace by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacology and Therapeutics-III This course is designed to provide students with broad un the pharmacology, pathophysiology, clinical pharmacoki special emphasis on the thyroid disorders. The course incortopics of this course. The course will be taught concurrent integrated knowledge. Applied Pharmacokinetics The course deals with the concepts of the clinical pharmacokinetics organ impairment and clinical transplant pharmacokinetics | ACE inhibitors, ARBs, cardiac glyd a, the management guidelines, the management guidelines, the Course Code: CP705 macy practice. It covers the known ptoms, diagnosis, treatment, mar- r-the-counter (OTC) medications I care, ears, eyes, nose and throach h, children's care, and smoking of s needed to deal with patients in Course Code: CP706 inetic and pharmacotherapy in cludes practical classes using can tly with Applied Pharmacokinet Course Code: CP707 cokinetics of certain drugs and coss and therapeutic drug monitori | ications) of beta blockers, α-blocker cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. Is used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also In the hospital and community Credit Hours: 3+1 system pharmacology in addition t major area of endocrinology with se-based approaches related to the ics to offer the maximum benefit of Credit Hours: 2+0 alculation of doses of drugs during ng, drug administration, alteration | | |
| characteristics (mechanism of action, benefits, adverse effect diuretics, vasodilators, calcium channel blockers, nitrates, A the pharmacologic benefits of medications in each disease educations of the studied disorders are fully covered. Pharmacy Practice This course introduces students to various aspects of phar be managed by the pharmacist concerning aetiology, sym Moreover, the student will learn the different types of over cases, such as respiratory and GIT systems, skin and dental management. Further areas of learning are women's health provide the student with professional communication skills pharmacology and Therapeutics-IIII This course is designed to provide students with broad un the pharmacology, pathophysiology, clinical pharmacoki special emphasis on the thyroid disorders. The course inc topics of this course. The course will be taught concurrent integrated knowledge. | ACE inhibitors, ARBs, cardiac glyd a, the management guidelines, the management guidelines, the Course Code: CP705 macy practice. It covers the known ptoms, diagnosis, treatment, mar- r-the-counter (OTC) medications I care, ears, eyes, nose and throach h, children's care, and smoking of s needed to deal with patients in Course Code: CP706 inetic and pharmacotherapy in cludes practical classes using can tly with Applied Pharmacokinet Course Code: CP707 cokinetics of certain drugs and coss and therapeutic drug monitori | cations) of beta blockers, α-blocker cosides and antiarrhythmics. Finally reatment algorithms, and patient Credit Hours: 3+1 wledge of minor diseases that can anagement and counselling. s used for a variety of medical at (ENT) problems, as well as pain cessation. This course will also in the hospital and community Credit Hours: 3+1 system pharmacology in addition t major area of endocrinology wit se-based approaches related to the ics to offer the maximum benefit of Credit Hours: 2+0 alculation of doses of drugs during ng, drug administration, alteration | | |

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.

| Pharmaceutical Care | Course Code: CP710 | Credit Hours: 2+0 | | | |
|--|--|---|--|--|--|
| This course provides the knowledge and experience | that enables the students to understa | and and describe clinical pharmacy | | | |
| and pharmaceutical care practice aspects. The aim of | nd pharmaceutical care practice aspects. The aim of this course is to provide the students with the skills of treatment | | | | |
| ssessment, 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, differe | lifferent types of patients drug related needs, different types of drug related problems and taking decision with ethical | | | | |
| considerations in the practice of clinical pharmacy. | | | | | |
| Pharmacology and Therapeutics-IV | Course Code: CP711 | Credit Hours: 3+1 | | | |
| This course is designed to provide students wit | h integrated knowledge of basic | pharmacology of various | | | |
| classes of antibacterial, antiviral, antifungal and | d chemotherapeutic agents. Focu | is is emphasized on main | | | |
| indication of each antimicrobial, its significant | adverse effect and precautions to | o avoid drug resistance. | | | |
| Furthermore, the course covers the manageme | • | 0 | | | |
| guidelines including lower respiratory tract, uri | | | | | |
| Pharmacogenomics & Precision Medicine | Course Code: CP712 | Credit Hours: 3+0 | | | |
| The goal of the course is to give students an underst. | | | | | |
| to find solutions in drug therapy optimization a | | | | | |
| | | | | | |
| pharmacogenomics. This course discusses genetic b | | | | | |
| toxicity, adverse drug reactions and drug-gene intera | • | brough understanding of the genetic | | | |
| component of patient variability to deliver effective in | ndividualized pharmaceutical care. | | | | |
| Hospital Pharmacy | Course Code: CP713 | Credit Hours: 2+0 | | | |
| The aim of this course is to provide the students with | knowledge of the principles of phar | | | | |
| | ו גווטשופטטפ טו ווופ טווונוטופג טו טומו | macy practice in a hospital setting | | | |
| • | | | | | |
| It aims to enable students to gain knowledge to prac | tice in various areas of hospital pharr | macy including understanding the | | | |
| It aims to enable students to gain knowledge to prac basic layout of the pharmacy department in a hospit | tice in various areas of hospital pharr al setting; understanding the roles of | macy including understanding the the pharmacist in hospital practice | | | |
| It aims to enable students to gain knowledge to prac basic layout of the pharmacy department in a hospit including the distribution of medications, medication | tice in various areas of hospital pharr al setting; understanding the roles of compounding, collaborations as a m | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit including the distribution of medications, medication other patient care services, identifying and reporting | tice in various areas of hospital pharr al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and nastering the administrative part of | | | |
| It aims to enable students to gain knowledge to prac | tice in various areas of hospital pharr al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and nastering the administrative part of | | | |
| It aims to enable students to gain knowledge to prac basic layout of the pharmacy department in a hospit- including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and p | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of is. Credit Hours: 1+0 harmacy professionals dealing with | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit- including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of hs. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit- including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of hs. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit- including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici | tice in various areas of hospital pharn al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br ng pharmaceutical profession and tra | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of is. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit- including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br ng pharmaceutical profession and tra Course Code: CP715 | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of its. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br ing pharmaceutical profession and trac Course Code: CP715 s with a basic understanding of the co | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of hs. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 procepts and practice of | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students pharmacoepidemiology and pharmacovigilance in ar | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m in control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br ing pharmaceutical profession and tra Course Code: CP715 s with a basic understanding of the co eas related to the assessment of drug | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of its. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospital including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students pharmacoepidemiology and pharmacovigilance in an use. This course will meet the needs of a wide variety | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m in control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br ing pharmaceutical profession and tra Course Code: CP715 s with a basic understanding of the co eas related to the assessment of drug | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of ns. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students pharmacoepidemiology and pharmacovigilance in ar use. This course will meet the needs of a wide variety Events/Reactions. | tice in various areas of hospital pharm al setting; understanding the roles of a compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 as related to pharmacy practice and pl es, and operations in institutions. A Br ing pharmaceutical profession and tra Course Code: CP715 with a basic understanding of the co eas related to the assessment of drug of practitioners in detecting, manag | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of is. Credit Hours: 1+0 harmacy professionals dealing with tief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug ing, reporting of Adverse Drug | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students pharmacoepidemiology and pharmacovigilance in ar use. This course will meet the needs of a wide variety Events/Reactions. Clinical Toxicology | tice in various areas of hospital pharm al setting; understanding the roles of a compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br ng pharmaceutical profession and tra Course Code: CP715 s with a basic understanding of the co eas related to the assessment of drug of practitioners in detecting, manag Course Code: CP716 | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of hs. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug ing, reporting of Adverse Drug Credit Hours: 2+0 | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students pharmacoepidemiology and pharmacovigilance in ar use. This course will meet the needs of a wide variety Events/Reactions. Clinical Toxicology The course is intended to empower students with ba | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br ing pharmaceutical profession and tra Course Code: CP715 s with a basic understanding of the co- eas related to the assessment of drug of practitioners in detecting, manage Course Code: CP716 sic knowledge of Clinical Toxicology. | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of hs. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug ing, reporting of Adverse Drug Credit Hours: 2+0 The major focus of the course is on | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit- including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations | tice in various areas of hospital pharm al setting; understanding the roles of a compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br ing pharmaceutical profession and tra Course Code: CP715 s with a basic understanding of the co eas related to the assessment of drug of practitioners in detecting, manag Course Code: CP716 sic knowledge of Clinical Toxicology. thes for the management of poisoned | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of ns. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug ing, reporting of Adverse Drug Credit Hours: 2+0 The major focus of the course is on patients. Selected topics are | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students pharmacoepidemiology and pharmacovigilance in ar use. This course will meet the needs of a wide variety Events/Reactions. Clinical Toxicology The course is intended to empower students with ba basic principles, mechanisms, and common approach covered in this course that includes occupational, here | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m in control system & unit Dose System Course Code: CP714 s related to pharmacy practice and plass, and operations in institutions. A Br ing pharmaceutical profession and tra Course Code: CP715 s with a basic understanding of the co- eas related to the assessment of drug of practitioners in detecting, manag Course Code: CP716 sic knowledge of Clinical Toxicology. hes for the management of poisoned avy metals and drug toxicities. Studer | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of its. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug ing, reporting of Adverse Drug Credit Hours: 2+0 The major focus of the course is on patients. Selected topics are | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students pharmacoepidemiology and pharmacovigilance in ar use. This course will meet the needs of a wide variety Events/Reactions. Clinical Toxicology The course is intended to empower students with ba basic principles, mechanisms, and common approach | tice in various areas of hospital pharm al setting; understanding the roles of compounding, collaborations as a m any possible drug interactions and m in control system & unit Dose System Course Code: CP714 s related to pharmacy practice and plass, and operations in institutions. A Br ing pharmaceutical profession and tra Course Code: CP715 s with a basic understanding of the co- eas related to the assessment of drug of practitioners in detecting, manag Course Code: CP716 sic knowledge of Clinical Toxicology. hes for the management of poisoned avy metals and drug toxicities. Studer | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of ns. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug ing, reporting of Adverse Drug Credit Hours: 2+0 The major focus of the course is on patients. Selected topics are | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospit including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students pharmacoepidemiology and pharmacovigilance in ar use. This course will meet the needs of a wide variety Events/Reactions. Clinical Toxicology The course is intended to empower students with ba basic principles, mechanisms, and common approach covered in this course that includes occupational, here selected chemicals/drugs exert toxic effects, present Pharmacology and Therapeutics-V | tice in various areas of hospital pharm al setting; understanding the roles of a compounding, collaborations as a m any possible drug interactions and m on control system & unit Dose System Course Code: CP714 s related to pharmacy practice and pl es, and operations in institutions. A Br ing pharmaceutical profession and tra Course Code: CP715 s with a basic understanding of the co eas related to the assessment of drug of practitioners in detecting, manag Course Code: CP716 sic knowledge of Clinical Toxicology. hes for the management of poisoned avy metals and drug toxicities. Studer and managed clinically. Course Code: CP717 | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of ns. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug ing, reporting of Adverse Drug Credit Hours: 2+0 The major focus of the course is on patients. Selected topics are nts will gain knowledge of how Credit Hours: 2+1 | | | |
| It aims to enable students to gain knowledge to prace basic layout of the pharmacy department in a hospital including the distribution of medications, medication other patient care services, identifying and reporting hospital pharmacy services including drug distribution Pharmacy Laws and Drug Regulations The course covers various policies, laws & regulation licensing, pharmacy operations, controlled substance including nature and sources of UAE laws on practici Pharmacoepidemiology &Pharmacovigilance This is an introductory course, which equips students pharmacoepidemiology and pharmacovigilance in ar use. This course will meet the needs of a wide variety Events/Reactions. Clinical Toxicology The course is intended to empower students with ba basic principles, mechanisms, and common approach covered in this course that includes occupational, he selected chemicals/drugs exert toxic effects, present | tice in various areas of hospital pharmal setting; understanding the roles of a compounding, collaborations as a many possible drug interactions and man control system & unit Dose System Course Code: CP714 serelated to pharmacy practice and plass, and operations in institutions. A Bring pharmaceutical profession and trace Course Code: CP715 seventh a basic understanding of the correase related to the assessment of drug of practitioners in detecting, manage Course Code: CP716 sic knowledge of Clinical Toxicology. The for the management of poisoned avy metals and drug toxicities. Studer and managed clinically. Course Code: CP717 prehensive understanding of respirated to the sevent of the correase for the management of poisoned avy metals and drug toxicities. Studer and managed clinically. Course Code: CP717 prehensive understanding of respirated to the sevent of the correase for the management of poisoned avy metals and drug toxicities. Studer and managed clinically. Course Code: CP717 prehensive understanding of respirated to the sevent of the correase for the management of poisoned avy metals and drug toxicities. Studer and managed clinically. Course Code: CP717 prehensive understanding of the spirated to the sevent of the sevent of the correase code: CP717 prehensive understanding of the spirated to the sevent of the sevent | macy including understanding the the pharmacist in hospital practice nember of the healthcare team, and hastering the administrative part of is. Credit Hours: 1+0 harmacy professionals dealing with rief overview of the legal system ading in a medicine profession. Credit Hours: 2+0 oncepts and practice of g safety and risk-benefit of drug ing, reporting of Adverse Drug Credit Hours: 2+0 The major focus of the course is on patients. Selected topics are nts will gain knowledge of how Credit Hours: 2+1 ory system disorders (i.e. asthma and | | | |

arthritis, gout & 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.

| Natural Medicines Safety and Efficacy | Course Code: CP718 | Credit Hours: 3+1 |
|--|--|--|
| Natural medicines are types of medicines that are obtain | ned from natural sources like plant | s, animals, fungi, or marine |
| products for the treatment of some Diseases. Natural me | edicines are considered as importa | ant alternative to modern medicine |
| Γhe aim of this course is to provide the students informa | ation about the international guide | elines for assessing the quality, |
| safety and the efficacy of natural medicines that present | in the pharmaceutical markets, ac | cording to WHO. In addition, it |
| provides the students information on the potential healt | h benefits of natural medicines, th | eir pharmacological action, |
| olkloric uses, clinical studies, contraindications, side effe | ects, interaction with other drugs, | name of the supplement/s |
| nethods of preparation and the safe doses. | | |
| Pharmaceutical Administration and Pharmacoeconor | mics Course Code: CP719 | Credit Hours: 2+0 |
| The aim of this course is to provide the students with the | e working knowledge and fundam | ental principles of management |
| related to pharmacy practice leadership. During this cou | rse, students are exposed to vario | us administrative skills, strategic |
| olanning, motivational theories and risk management, w | hich enable them to efficiently ma | nage health care sectors. This |
| course also covers the introduction of macoeconomics p | pharmacoeconomics, need and pra | actice of pharmacoeconomic |
| analyses in drug management, basic types of pharmacoe | economic analyses, drug utilizatior | n studies |
| Pharmacy Automation & Informatics | Course Code: CP720 | Credit Hours: 2+0 |
| This course will be conducted in collaboration with autor | mation industry to introduce the c | oncept of automation in pharmac |
| ike robotic pharmacy, use of mobile health tools, clinica | I software applications ("clinical ap | ops"), and other associated device |
| used by clinicians and patients for patient care. This cour | rse acquaints with cyber-security s | ystems and procedures for |
| ulnerabilities. This course also supports key decision-ma | aking roles for pharmacists in the | planning, selection, design, |
| mplementation, and maintenance of medication-use inf | formation systems, electronic heal | th records. |
| Professional Skills in Practice | Course Code: CP721 | Credit Hours: 1+2 |
| The aim of this course is to provide the students with the | e knowledge of the various health | care providers, rapidly evolving |
| ypes of healthcare delivery systems, and complexities of | f 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 |
| hey need to cultivate informed, compassionate and effe | ective patient care. | |
| Capstone course | Course Code: CP722 | Credit Hours: 0+2 |
| This course helps in exploring the creativity of the studer | nts with a variety of realistic requir | rements and constraints in |
| developing clinical pharmacy activities. The course is clin | nically oriented to emphasize the s | afety and efficacy in patient care. |
| This course works with various elements of pharmaceution | cal care identified in the courses le | earned in all semesters to arrange |
| and combine them to form a new concept (i.e., thinking | outside the box), developing a cre | ative, unique solution to the |
| | project-based learning such as the | e challenges, effective learning |
| problem. This course integrates the problem based and | | |
| problem. This course integrates the problem based and through enquiry. This course collaboratively applies real | world and theoretical knowledge | to solve a problem. |
| . . | world and theoretical knowledge Course Code: CP723 | Credit Hours: 0+2 |
| hrough enquiry. This course collaboratively applies real | Course Code: CP723 | Credit Hours: 0+2 |
| hrough enquiry. This course collaboratively applies real Calculation in Practice | Course Code: CP723 calculations to pharmacy students | Credit Hours: 0+2 with thorough revision, and |
| through enquiry. This course collaboratively applies real Calculation in Practice The aim of this course is to provide clear instructions of | Course Code: CP723 calculations to pharmacy students y which develops confidence in th | Credit Hours: 0+2 with thorough revision, and em. Since pharmacist use |

Professional Practice Experience (PPE) - Credit Hours: 24

IPPE01: Introductory Professional Practice Experience for 200 hours during the summer semester in the second year of BPharm.

IPPE02: Introductory Professional Practice Experience-Healthcare setting for 120 hours (Health Care) Summer semester Year 3



APPE: Advanced Professional Practice Experience 640 hours during the Fall semester of the fifth year of BPharm. **Industrial Training: INTR,** 40 hours in spring semester Year 4

knowledge by a panel of internal and external examiners.

acid pathways and the drugs containing these constituents.

| Capstone Proje | ect | | | | | | | | | | | |
|---|---------------------------------|--------------------|--|--|--|--|--|--|--|--|--|--|
| Capstone Project Course Code: CS701 Credit Hours: 0+2 | | | | | | | | | | | | |
| In the final phase of their studies, students have to present a project ba | ased on all-round knowledge the | y have acquired in | | | | | | | | | | |
| different areas of pharmaceutical sciences. The presented project is evaluated, and the students are assessed for their | | | | | | | | | | | | |

ELECTIVE COURSES AREA I **Organizational Behavior and Cultural Diversity** Credit Hours: 2+0 Course Code: EC7011 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. **Emotional Intelligence and Leadership** Course Code: EC7012 Credit Hours: 2+0 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. **AREA II Nuclear Pharmacy** Course Code: EC7021 Credit Hours: 2+0 Nuclear pharmacy is a specialty area of pharmacy practice 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 and safety measures in nuclear pharmacy practice. Credit Hours: 2+0 Pharmacognosy and Phytochemistry Course Code: EC7022 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

AREA III
Regulatory Affairs
Course Code: EC7031
Credit Hours: 2+0

Regulatory AffairsCourse Code: EC7031Credit Hours: 2+0This 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, USA and GCC countries.

This course will offer the B. Pharm graduate to work as Regulatory affairs specialist in health care entities.

| | Pharmaceutical GMP Co | Course Code: EC7032 | Credit Hours: 2+0 |
|--|-----------------------|---------------------|-------------------|
|--|-----------------------|---------------------|-------------------|

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.

| Are | ea IV | |
|--|--|---|
| Nutrition and Health | Course Code: EC7041 | Credit Hours: 2+0 |
| Nutrition and Health course provides the pharmacy students bat the human body and their sources in the diet. This course gives issue related to nutrition. The course makes the students aware course also makes the students to solve nutrition-related proble | the students an understanding of about what to eat and how to cl | of the causes behind health hoose healthy foods. The |
| | | |

| | Bioassay and | Scre | eni | ng i | n Di | rug Deve | lopr | nent | | Cou | rse Co | de: EC7 | 042 | | Cre | edit ⊦ | lours | : 2+0 | |
|-----|--------------|------|-----|------|------|----------|------|------|--|-----|--------|---------|-----|--|-----|--------|-------|-------|--|
| - Г | | | | | | | | | | | | - | | | | | | | |

The course provides basics of tests applied in screening and bioassay of new substances for the drug discovery and development. 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-inflammatory, analgesics, Cardiac glycosides, antihypertensive agents are fully discussed. In vivo and invitro antitumor assay (cell-based assay MTT and SRB assay), flow cytometry, high throughput screening, cardiovascular risk assessment in modern drug development, preclinical safety and toxicity testing of drugs in addition to target identification, validation and biological evaluation will be covered.

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.

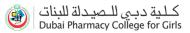
Types of Assessment:

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). **Kahoot:** Kahoot! can be used to review students' knowledge, for formative assessment.

Project learning by doing: is a student-centered teaching modality, in which students in groups of 3-4 work together as a team to create a 2D or 3D project that represents one of the concepts of the course.

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:

| Pango of Marks | Grade Poi | | For BP | harm |
|----------------|-----------|--------|----------------|--------------|
| Range of Marks | Grade Pol | nu | Evaluation | Grade Symbol |
| 95- 100 | 4 | | Outstanding | A+ |
| 90 - 94.99 | 3.75 | | Excellent | A |
| 85 - 89.99 | 3.50 | | Very Good | B+ |
| 80 - 84.99 | 3.00 | | Good | В |
| 75 – 79.99 | 2.50 | | Satisfactory | C+ |
| 70 – 74.99 | 2.00 | | Pass | C |
| 65 – 69.99 | 1.5 | | Unsatisfactory | D+ |
| 60 - 64.99 | 1.0 | | Unsatisfactory | D |
| Below 60 | Failed | | Failed | F |
| | Adminis | trativ | e Codes | |
| Incomple | ete | | I | |
| Withdra | w | | 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 it's 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

| 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 |
| 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. Pharm |
|----------------|----------------|
| GPA / CGPA | Evaluation |
| 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

- **1.** 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.
- 2. Grade "I" is granted to the student if the average marks of the course work is not less than 60%.
- **3.** Requests for an "I" grade is made on a form available from Dean's office
- **4.** 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.
- **5.** (For Credit System students only) after the two weeks add/drop period, and up to the end of the 10th 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.

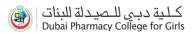
(d) Expulsion from the College – If caught cheating (third time), Expulsion of the student from the College.

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.

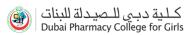


 Probation, suspension or expulsions are courses of action that may be determined by the Dean , in accordance with Student Disciplinary Committee.



9.1.Scheme of Assessment

| | | | | | | | | | | | | | | | | Assess | ment T | ools | | | | | | | | |
|---|-------------------|--------|---|----------|-----------|-------------|---------|------|----------------|--------------------------------------|-----------------------|------------|-------------------------|--------|-----------|----------------|---------------|----------|-------|----------------|--------------|------|---------------------|--------|------------|------------|
| | | | | | | | | | | | | | | | | | | | | | | | Prac | tical | | |
| Semester | Code | Domain | Courses | l ecture | Practical | Total Units | 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 | Exam | Attitude & Behavior | Manual | Attendance | Final Exam |
| | 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 |
| ter | GE701 | GE | Mathematics & Statistics | 2 | 0 | 2 | 10 | | | 10 | | | | | | | | 15 | | | 25 | | | | | 40 |
| Fall Semester | GE702 | GE | Medical Terminology and Information Literacy | 2 | 1 | 3 | | | | | | 15 | 10 | | | 10 | | | | | 25 | | | | | 40 |
| alle | GE703 | GE | Computer Application | 0 | | 2 | 10 | | | 10 | | 15 | | | | | | | | | 25 | | | | | 40 |
| – | GE704 | GE | Islamic Study | 2 | | 2 | 10 | | | 10 | | 15 | | | | | | | | | 25 | | | | | 40 |
| | GE705 | GE | History of Pharmacy | 1 | 0 | 1 | 10 | 10 | | | | 15 | | | | | | | | | 25 | | | | | 40 |
| | PC701 | PS | Introduction to pharmacy | 1 | 0 | 1 | 10 | 10 | | | | 15 | | | | | | | | | 25 | | | | | 40 |
| | PN702 | PS | Pharmaceutical Organic Chemistry- II | 2 | 1 | 3 | 10 | | | 15 | | | | | | | | | | | 20 | 15 | 3 | 4 | 3 | 30 |
| ester | CP701 | CS | Social Behavior Aspects in Pharmacy | 2 | | 2 | 10 | 10 | | | | | | | | | 15 | | | | 25 | | | | | 40 |
| e de la | GE706 | GE | Positive psychology | 2 | 0 | 2 | 10 | 10 | | | | | 15 | | | | | | | | 25 | | | | | 40 |
| Spring Semester | GE707 | GE | Green & Sustainable Pharmacy | 2 | | 2 | 10 | | | | | 10 | 15 | | | | | | | | 25 | | | | | 40 |
| s. | PC702 | PS | Pharmaceutics-1 | 3 | 1 | 4 | 10 | | | | | 15 | | | | | | | | | 20 | 15 | 3 | 4 | 3 | 30 |
| | MC703 | BBS | Anatomy and Physiology-II | 2 | | 3 | 10 | | | | | 15 | | | | | | | | | 20 | 15 | 3 | 4 | 3 | 30 |
| r - | GE708 | GE | Arabic Language Skills | 2 | 0 | 2 | 10 | | | 10 | | 15 | | | | | | | | | 25 | | | | | 40 |
| nme | GE709 | GE | UAE Society | 2 | 0 | 2 | 10 | | | 10 | | 15 | | | | | | | | | 25 | | | | | 40 |
| Summer Semester | EC7011/E C7012 | EC | Elective Area- I | 2 | 0 | 2 | 10 | | | 10 | | 15 | | | | | | | | | 25 | | | | | 40 |
| Fall Semester | CP702 | CS | Pharmacology and Therapeutics-I | 3 | | 4 | 10 | | | | 10 | 15 | | | | | | | | | 20 | 10 | 1 | 2 | 2 | 30 |
| F | 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 |
| | PN704 | PS | Medicinal Chemistry -II | 2 | 1 | 3 | 10 | | | | | | | | 15 | | 20 | 15 | 5 | 5 | - | 30 |
| ster | PC704 | PS | Biopharmaceutics and Pharmacokinetic | 3 | 0 | 3 | 5 | 5 | | | 15 | | | 15 | | | 30 | | | | | 30 |
| eme | CP703 | CS | Clinical Biochemistry | 2 | 1 | 3 | 10 | | | | | | | | 15 | | 20 | 15 | 5 | 5 | - | 30 |
| Spring Semester | CP704 | CS | Pharmacology and Therapeutics-II | 2 | 1 | 3 | 10 | | | | | | | | 15 | | 20 | 15 | 5 | 5 | - | 30 |
| Sp | 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 |
| Summer Semester | IPPE-01 | CS | Introductory Professional Practice Experience (See catalog) | 0 | 5 | 5 | | | | | | | | | | | | | | | | |
| | 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 |
| ter | PC706 | PS | Pharmaceutical Biotechnology | 2 | 0 | 2 | 10 | 10 | | | 15 | | | | | | 25 | | | | | 40 |
| Fall Semester | CP706 | CS | Pharmacology and Therapeutics-III | 3 | 1 | 4 | 10 | | | 10 | 15 | | | | | | 20 | 10 | 1 | 2 | 2 | 30 |
| Falls | 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 |
| | 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 |
| Spring Semester | CP711 | CS | Pharmacology and Therapeutics-IV | 2 | 1 | 3 | 10 | | | | | | | | 15 | | 20 | 15 | 5 | 5 | - | 30 |
| ng Ser | CP712 | CS | Pharmacogenomics and Precision Medicine | 3 | 0 | 3 | 10 | 10 | | | | 15 | | | | | 25 | | | | | 40 |
| Sprii | EC7021/E C7022 | EC | Elective Area-II | 2 | 0 | 2 | 10 | 10 | | | 15 | | | | | | 25 | | | | | 40 |
| | GE710 | GE | Innovation and Entrepreneurship | 2 | 0 | 2 | 10 | 10 | | | 15 | | | | | | 25 | | | | | 40 |
| er | IPPE-02 | CS | Introductory Professional Practice Experience (See catalog) | 0 | 3 | 3 | | | | | | | | | | | | | | | | |
| Summer semester | INTR | PS | Industrial Training(See catalog) | 1 | 0 | 1 | | | | | | | | | | | | | | | | |



| | CP713 | CS | Hospital Pharmacy | 2 | 0 | 2 | 10 | | | 10 | | | | 15 | | | 25 | | | | | 40 |
|------------------|-------------------|-------|---|---|--------|--------|----|----|----|----|----|----|----|----|----|----|------|----|---|---|---|----|
| | CP714 | CS | Pharmacy Laws and Drug Regulations | 1 | 0 | 1 | | | | | | 50 | | | | | | | | | | 50 |
| e | CP715 | CS | Pharmacoepidemiology & Pharmacovigilance | 2 | 0 | 2 | 20 | | | | | 40 | | | | | | | | | | 40 |
| nest | CP716 | CS | Clinical Toxicology | 2 | 0 | 2 | 10 | 10 | | | | 15 | | | | | 25 | | | | | 40 |
| Fall Semester | CP717 | CS | Pharmacology and Therapeutics- V | 2 | 1 | 3 | 10 | | | | | | | | 15 | | 20 | 15 | 5 | 5 | - | 30 |
| Ľ | 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 |
| | CP719 | CS | Pharmaceutical Administration and Pharmacoeconomics | 2 | 0 | 2 | 10 | | | | | 15 | | | | | 25 | | | | | 40 |
| Semester | CP720 | CS | Pharmacy Automation and Informatics | 2 | 0 | 2 | 10 | | | | 25 | | | | | | 25 | | | | | 40 |
| Ser | CP721 | CS | Professional Skills in Practice | 1 | 2 | 3 | | | | 10 | 20 | | | | | 30 | | | | | | 40 |
| bu | CP72 | CS | Capstone Course | 0 | 2 | 2 | 15 | 15 | 30 | | | 30 | | 10 | | | | | | | | |
| Spring | 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 R | ubrics | | | | | | | | | |
|---|---|---|--------------------|--------------------|----------------------------------|---------|-------------|---------------------|-----------------------------------|-----------------|-------------------|-------|
| udent Presenter: | Grad | ding Scale: | | F | D+ | С | C+ | В | B+ | Α | A+ | |
| aluator: | Date: | | | | | | - | | | | | |
| Knowledge & content | 1 (below 40) | 2 (40-60) | 3 (60-80) |) | 1 | | 4 | 30-100 |)) | <u> </u> | 1 | Score |
| Organization and Presentation | Hard to follow; sequence of information jumpy | Most of information presented in sequence | 1 | | oresente ience; | | to ir Ic | nteresti | | / in | as bllow th | ne |
| Background Content | Material not clearly related to topic C background dominated seminar | Material sufficient for clear understanding but not clearly presented | | under | cient for rstandin esented | | √D u | ndersta | suffic anding onally pr | | AN | - |
| Contribution of Work | Significance not mentioned or just hinted | Significance mentioned | Signific | ance e | explained | k | | ignifica xplaine | | eption | ally well | |
| Knowledge of Subject | Does not have a grasp of information; answered only rudimentary questions | At ease with information; answered most questions | | ns but | ered all failed t | 0 | a | | d all | | nowledg ons wi | |
| Presentation Skills | | | 1 | | | | | | | | | 1 |
| Graphics (use of PowerPoint) | Uses graphics that rarely support text and presentation | Uses graphics that relate to text and presentation | Uses gr explain | - | that nd prese | entatio | n e | 0 | | | text ar | nd |
| Mechanics | The presentation has more than 10 misspellings and/or grammatical errors | The presentation has no more than 5 misspellings and/or grammatical errors | 2 missp | ellings | has no n s natical e | | an T | he p nisspell | oresenta ings or itical err | | has r | 10 |
| Eye Contact | Reads most slides; no or just occasional eye Contact | Refers to slides to make points; occasional eye contact | | | es to mal majorit | • | | | o slides d with th | ke poin ence | :S; | |
| Elocution - not ability to speak English language | Mumbles and/or Incorrectly pronounces some terms | Incorrectly pronounces some terms | Incorre terms | ctly pr | ronounc | es a fe | | , | precise tiation o | | rms | |
| Intonation | Voice is low; challenging to hear | Voice fluctuates from low to clear; difficult to hear at times | | ions; t ell mos | lear w the audi st of | | an st | teady; | clear an the au Il times | | can he | ar |
| Length and Pace | Short; less than 30 min | Short 40 min OR long >50 | Adequa | ite 40- | 45 min | | A | pprop | riate (45 | -50 mi | n) | |
| | Rushed or dragging throughout | Rushed or dragging in parts | Semina | r most | ly well- | baced | v | Vell-pa | ced thro | oughou | ıt | |



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.

Flipped classroom-is an instructional strategy and a type of blended learning, which aims to increase student engagement and learning by having the students complete readings at home and work on live problem-solving during class time.

Kahoot- is a game-based learning platform, used as educational technology. "kahoots", are user-generated multiple-choice quizzes that can be accessed via a web browser or the Kahoot app. Kahoot! can be used to review students' knowledge, for formative assessment.

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, online 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.
- 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 <u>Student Behavior Management Distance Learning 2020</u> 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 C | ollege for Girls |
|-------------------------------------|-------------------------|
| Ground Floor | First Floor |
| Pharmaceutics Laboratory | Research Laboratory |
| Instrumental Analysis Laboratory | Dubai Medical College |
| DPC Extension | 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.

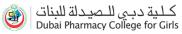
Opening hours:

| 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.

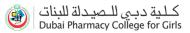
18. Glossary of Terms

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.



For Experiential learning (Professional Practice Experience) 1 credit hour refers to 40 contact hours 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

- **a.** An **elective** is a course chosen by a student listed from different areas available during the study period.
- **b. General education** is a course offering within the following areas such as Islamic studies, English, Mathematics, etc.
- **c.** 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.
- **d. 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.

e. 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.

Academic Integrity

Collusion: This offence is the joint production with another person or persons of an assessment that contributes to a unit grade where this is not permissible in the assessment task.

Fabrication: This offence consists of the presentation of any false or fabricated information, results or conclusions in any form of assessment, including practical work, field studies, number of hours (including practice hours) completed, oral presentations, interviews and reports on work placements.

Cheating: This offence consists of attempting to complete an examination or in-class test that counts towards a unit grade by unfair means, including but not limited to:

obtaining help from others in a manner not explicitly permitted by the regulations for the examination, including the use of mobile telephones, pagers, or any other electronic device capable of sending or receiving text etc;

- bringing into the examination any unauthorised materials, or
- referring during the examination to any unauthorised material.

Impersonation: This offence is the assumption by any person of the identity of a student with intent to deceive or gain unfair advantage. Impersonation commonly entails using a substitute to undertake, in full or part, an examination or other assessment task.

Plagiarism: This offence consists of copying work or attempting to copy from any other source, published or unpublished, including the work of a fellow student or another person, in a manner not authorised by the regulations of the assessment, and presenting the copied work as if it were the student's own work.

It includes written and non-written forms of production, for example, in performance, design, the making of artefacts or other objects, and oral presentations, and may constitute part or all of a submitted assessment. Self-plagiarism, a student copying material from another assignment she has submitted, is generally not considered as an offence unless this is explicitly denied in the assignment brief.



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.

INTR: 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

Responsibility for Application

Head, Student's Professional Practice Experience Unit.

Professional Practice Experience in different pharmacy practice settings.

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 **Community Pharmacy** for not less than **200 hrs.**

II. Introductory Professional Practice Experience (IPPE 02) in **Healthcare setting** for not less than **120 hrs.**

III. Industrial Training (INTR) in the Pharmaceutical Industry for not less than 40 hrs

IV. Advanced Professional Practice Experience (APPE) in Hospitals for not less than 640 hrs

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 in the pharmacy by DPCG preceptor (midterm evaluation). After completion of 200 hours of training; students will be evaluated (End term evaluation). 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 PPE.
- 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 PPE.
- 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 PPE.
- **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 PPE site or the preceptor. She shall report within five days after the end of each PPE to PPE 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 (IPPE01) in one or more Community Pharmacies, the students will be able to:

LO1: Outline the pharmacist role and responsibilities and licensing procedure.

LO2: Describe the organization and layout of the community pharmacy.

LO3: Identify the process of prescription and dispensing

LO4: Identify the formulation and dosage forms of the most used medication

LO5: List out different medicational delivery aids to treat respiratory disorders

LO6: Discuss the process of Disposal of expired medication and Refund policies

LO7: Adapt constantly to advances in information technology at the workplace.

LO8: Describe the function of financial accounting and balance sheet recording

LO9: observe and describe the medical insurance process.

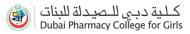
LO10. Demonstrate prescription screening for drug-related problems and methods to resolve dispensing errors

LO11. Identify drug formulary and essential drug list according to WHO and UAE national Drug list LO12. Identify the product name, the active ingredient, adult dose, warning and cost of drugs used in common health condition

LO13. Identify and verify the dose, drug interaction and potentiation drug-related problem of prescribed medication

LO14. List out and identify drug brand, generic name, dose and mechanism of action of several drug LO15. Prepare patient information leaflet for a multiple-dose inhaler, insulin injection

LO16. Describe pharmacovigilance and list a few products that require ADR monitoring and reporting



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 and Evaluation | |
|--|------------------------|
| Assessment Tool | Score Distribution (%) |
| Assessment of daily activities (Site Preceptor-Community pharmacist) | 30 |
| Assignment (Faculty preceptor) | 10 |
| Presentation (Faculty preceptor) | 10 |
| Mid rotation competencies evaluation (Faculty preceptor) | 20 |
| End of rotation competencies evaluation (Faculty preceptor) | 30 |

II) Industrial Training (INTR)

It is taken by the students during the spring semester of B. Pharm. 4th 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:

LO1. Identify the role of Pharmaceutical Industries to produce quality medicines on large scale.

LO2. Identify different types of machinery used for manufacturing formulations such as compression, granulation, packing, etc.

LO3. Explain the working of different types of equipment used for the analysis of raw materials, in-process, and finished products.

LO4. Explain the production and packaging of liquid dosage forms, solid dosage forms, semisolid dosage forms, parenteral and sterile dosage forms.

LO5. Describe formulation development process as per the requirement of regulatory bodies.

LO6. Discuss raw materials and finished product handling in the Pharma industry – warehouse, supply chain, dispatch, and stores.

LO7. Recognize cGMP procedures followed by pharmaceutical industries.

LO8. Identify the corrective steps for troubleshooting in product manufacture.

LO9. Interpret the given laboratory data concerning stability and performance factors that influence drug stability.

LO10. Take initiative to learn, self-evaluate, discuss with peers and faculty for self-improvement.

LO11. Demonstrate ability to independently solve problems/conflicts at the workplace.

Supervisors for Industrial Training

Supervisors for the Pharmaceutical Industrial Training The INTR is monitored under supervision of:

- College Supervisor: Pharmaceutics Department, DPCG.
- Industry Supervisor: Training Center, Drug Manufacturing Industry.

Role & Responsibilities

a. College Supervisor

- ✓ To prepare a list of students eligible for the IPT.
- ✓ To send the list of students to the Industry Supervisor.
- ✓ To co-ordinate with the Industry Supervisor for:
- ✓ Student's transportation from College to Industry and back.
- ✓ Monitoring the training program.
- ✓ Solving any problem hindering proper training.
- ✓ Monitor student's attendance.
- ✓ To attend students' presentation in the Industry.

b. Industry Supervisor:

- ✓ To prepare a training program meeting the following requirements,
- ✓ To identify the Units in the Industry where training will take place as per the prescribed schedule.



- ✓ To identify the person responsible for marking the attendance of students during the training program.
- ✓ To determine the mode of PIT and appoint the person responsible for monitoring the training program.
- ✓ Fulfillment of 40 hours in the Industry.
- ✓ To submit each student a copy of the Academic Industrial Training Manual.
- ✓ To submit a report to the College Supervisor about the students' attendance.
- ✓ To submit a report on student's assessment to the College Supervisor at the end of the training in the Pharmaceutical Industry.
- ✓ At the end of the PIT, the Taring Center in the Industry offers the students a verified certificate indicating their completion of the training program

Evaluation of students receiving Industrial Training.

| S. No. | Assessment Category | Assessment (marks) |
|-----------|---|-----------------------|
| 2 | Punctuality (attendance, discipline etc.) | 10 |
| а. | (Full attendance = 10; 1 day absent = 8; 2 days or more = 6) | 10 |
| b. | Daily Written Report-logbook (knowledge gained about basic pharmaceutical technology) | 20 |
| C. | Tutorial session at the end of the day (level of understanding the role of pharmacist in the pharmaceutical technology) | 10 |
| d. | Written Final Exam (MCQs) | 30 |
| | Student Assignment (written report) and Presentation | 20 |
| e. | For submission = 10 For presenting = 10 | 20 |
| AVERAGE o | of TOTAL | 100 |

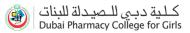
III) Introductory Professional Practice Experience-Health care setting (IPPE-02)

It is taken by the students in the summer semester of 3rd 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)

LO1- Describe the hospital pharmacy operations and drug distribution services.



LO2- Identify and use appropriate drug information sources and apply that information to respond to drug information services.

LO3- Provide pharmaceutical care services to clients of various healthcare setting.

LO4- Provide medication therapy management services in a various practice setting.

LO5- Describe the operations and functions of various regulatory centers in the healthcare system.

LO6- Demonstrate self-learning skills, problem-solving, and critical thinking abilities to advance professional services.

Criteria of a Field Preceptor

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

Responsibilities of filed 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 daily activity on reflective diary, the pharmacist and the DPCG preceptor write student reports and assessment.

| Assessment and Evaluation | |
|--|------------------------|
| Assessment Tool | Score Distribution (%) |
| Daily activity performance evaluation | 50 |
| Assignment 1 - organization and operational activities in Hospital | 10 |
| pharmacy | |
| Assignment 2 - Role of Pharmacist in Rehabilitation centers | 10 |
| Assignment 3- Role of Pharmacist in regulatory affairs | 10 |
| Presentation Group | 10 |
| End of rotation evaluation | 10 |

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 |
| | Credit Hours (Total) | | 16 (640 hours) |

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:

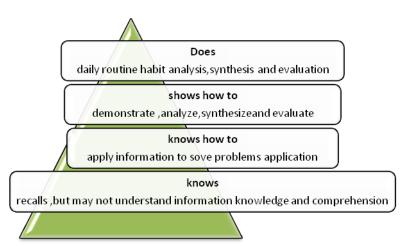
- 1. Duration of stay at each of the above units/services is arranged depending on the magnitude of the activities and the emphasis of the students' exposure. It may vary differently from each hospital according to the needs and facilities of the concerned hospital.
- 2. Students are to abide by the 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 |
| | Total | 200 |

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 allround 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 4-5. 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

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:

examining committee for the students' defence of their project and write up.

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 1st 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 |
|--|-------|
| Research Idea: 5 Marks | |
| - The topic is of importance and specifically related to the field of study. | |
| - The topic has theoretical and practical importance to the field of study. | |
| - The topic demonstrates innovative thinking and creativity. | |
| Organization and Formatting: 5 marks | |
| - The project is well organized. | |
| - Structurally correct sentences with correct grammar and vocabulary. | |
| - The entire project is presented in appropriate format as per the college guidelines. | |
| - Presentation of the material is highly appropriate and professional. | |
| - Logical order of information based on topic and appropriate transitions between ideas. | |



| | | Total Marks: | /2 |
|--------------------|--|--------------|----|
| - All citations ar | nd references are presented in proper format and do not need revision. | | |
| | and references are updated and appropriate to the study. | | |
| - Conclusion is | supported by information or data. | | |
| | analysis of research related to topic and compared to current study. | | |
| | e thinking and thoughtful insight. | | |
| | comprehensive introduction, methodology and discussion are presented. | | |
| | ons & References | | |
| | lusion | | |
| | ssion and Results | | |
| | imental or Methodology | | |
| | duction and Literature Review | | |
| | nical abstract | | |
| ✓ <u>Abstr</u> | | | |
| - The project is | divided into clear heading as follows: | | |
| Content: (15 m | | | |

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

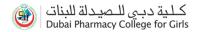
| Student name | Teamwork (12 marks) - Cooperation between the student and his group - Respect of time - Harmony - Behavior with the supervisor and colleagues - Contribution to the work | Work Progress (13 marks) Did the assigned work properly. Submitted the assigned work on time. Showed creativity and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



| Marking Scheme | | | |
|--|------------------|------------|--|
| ltem | Score out of 100 | Percentage | |
| Thesis writing evaluation (25 marks) | | 25% | |
| A. Research Idea | 5 | | |
| B. Organization and Formatting | 5 | | |
| C. Content | 15 | | |
| ✓ <u>Abstract</u> | | | |
| ✓ Graphical abstract | | | |
| ✓ Introduction and Literature Review | | | |
| ✓ Experimental or Methodology | | | |
| ✓ Discussion and Results | | | |
| ✓ <u>Conclusion</u> | | | |
| ✓ <u>Citations & References</u> | | | |
| 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 | |
| Prof.Dr. Saeed Ahmed Khan 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 | |
| Prof. Dr. Naglaa Gamil Shehab 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 | |
| Prof.Fazilatun Nessa 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 | |
| Mrs. Khuloud Abu Shawish Teaching & Research Assistant. | MSc. (ongoing) B.Pharm | Sharjah University Dubai Pharmacy College | 2020 2014 | |
| Mrs. Suzan Professional Staff | Master of Science | Mahatma Gandhi University | 2004 | |
| Prof. Dr. Aliasgar Fakruddin Shahiwala 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 | |
| <i>Prof. Dr.Bazigha K. Abdul Rasool</i> 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 | |
| Dr. Rana Sammour 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 | |
| Mrs. AlZahraa Mahmoud Hussain 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 | |
| Prof.Mirza Baig 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 | |
| Dr. Gazala Afreen Khan 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 | |
| Dr. Hanan Sayed Anbar | Ph.D. (Pharmacology & Toxicology) | Mansura University (Egypt) | 2017 | |



| DPCG FACULTY MEMBERS | | | |
|---|---|---|--------------------------|
| Name | Degrees | Institution | Year |
| Head of Faculty Development and Research Unit Assistant Professor in Clinical Pharmacy & Pharmacotherapeutics Department | M. Sc. (Pharmacology & Toxicology) | Mansura University (Egypt) | 2010 |
| Dr. Ammar Ali Saleh Jaber 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 |
| Dr. Doaa Kamal 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 |
| Prof. Kishore Gnana Sam Professor in Pharmacy Practice Clinical Pharmacy Consultant in DMU Hospital | PhD (Pharmacy Practice) | Manipal University of Higher Education | 2009 |
| Dr. Semira Beshir Associate Professor in Pharmacy Practice | PhD (in Pharmacy) Master (Clinical Pharmacy) B.Pharm | University Malaya (Malaysia) National University of (Malaysia) Addis Ababa University (Ethiopia) | 2018 2008 2006 |
| Ms. Yousra Adnan 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 |
| Ms. Eiman Shams Elddin Elgailani 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 |
| Ms. Maram Omar Abbas Teaching Assistant in Clinical Pharmacy | MPharm (Clinical Pharmacy) | Dubai Pharmacy College UAE) | 2021 |
| Mrs. Sabeena Salam 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 |
| <mark>Ms. Sadaf Sana</mark> 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 |
| Ms. Yasmeen Yaser Salem Teaching Assistant Department of Pharmaceutics. | B.Pharm MSc. (ongoing) | Dubai Pharmacy College | 2019 |



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

SUPERVISORS FOR PROFESSIONAL PRACTICE EXPERIENCE

HOSPITALS

Prof. Dr. Ali Syed Hussain, M.Sc., Ph.D.(USA) Director, Pharmaceutical Services, Coordinator, Professional Practice Experience, Dubai Health Authority-Dubai

Mrs. Amal Ali Salem, B. Pharm. Chief Pharmacist Supervisor, Al Wasl Hospital- Dubai.

Mr. Moh'd Sameh Ali, B. Pharm. Chief Pharmacist, Supervisor, Rashid Hospital- Dubai.

Mr. Murtada Mohd., B. Pharm. Actg., Chief Pharmacist, Supervisor- Dubai Hospital, Dubai.

Mrs. Fareeda Al Khaja, B. Pharm. (Egypt)Chief Pharmacist Supervisor, Al Maktoum Hospital- Dubai.

Ms. Lara Qadir Mafraq Hospital, Abu Dhabi

Ms. HebaElkholy SKMC Hospital, Abu Dhabi

Ms. Mahat Hussain Senior Pharmacist (Dubai Health Authority

PHARMACEUTICAL INDUSTRY

Mr. Idrees Siddiqui Manager Technical Operations Global Pharma Co LLC, Dubai- UAE

Mr. Ijaz Sheikh Pharmaceutical Industry

Mr. Ejaz Shahid Pharmaceutical Industry

COMMUNITY PHARMACY

Ms. Mariam M.Pharm Contact Number: +971543056363 Email ID: <u>mariam.o@supercare.ae</u> Position: Regulatory Affair Manager P.O.Box: 118347, Dubai. U.A.E Supercare Pharmacy

Mr.Mohd.Sandeep M.pharm Contact Number: 0529236592

Emai ID: <u>m.sandeep@asterpharmacy.com</u> Aster Pharmacy

Mr. Eby John M.Pharm Contact Number: +971529034923 Email ID; <u>eby.k@asterpharmacy.com</u> Aster Pharmacy