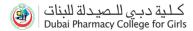
# Bachelor of Pharmacy Catalog

2023-2028 Batch 32

"Dubai Pharmacy College for Girls located in the Emirate of Dubai is officially licensed from 05/May/2023 to 04/May/2026 by the Ministry of Education of United Arab Emirates to award the Bachelor of Pharmacy degree in higher education."

Dubai Pharmacy College for Girl (DPCG), status is redesignated from Provisional International-Accreditation (Category 1 and 2) to Provisional International-Accreditation (\*online evaluation) by the Accreditation Council for Pharmacy Education (ACPE), USA with effect from September 1, 2023.



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

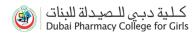




H. H. Shaikh Hamdan Bin Mohammed Bin Rashid Al Maktoum Crown Prince of Dubai



| DPCG Academic Calendar- Aca                                                                | ademic Year 2023         | -2024 (1445)                   |                                                         |
|--------------------------------------------------------------------------------------------|--------------------------|--------------------------------|---------------------------------------------------------|
| Fall Se                                                                                    | mester                   |                                |                                                         |
| Event                                                                                      | Day                      | Dates                          | Date / Hijri                                            |
| Beginning of 1st Semester for 2 <sup>nd</sup> , 3 <sup>rd,</sup> and 4 <sup>th</sup> years | Monday                   | 28/08/2023                     | Safar 12-1445                                           |
| Orientation & beginning of M. Pharm Clinical Pharmacy 1st Semester classes                 | Saturday                 | 02/09/2023                     | Safar 17-1445                                           |
| Beginning of 1st Year classes and Welcome Ceremony                                         | Monday                   | 04/09/2023                     | Safar 19-1445                                           |
| Beginning of Midterm Exams 1 <sup>st</sup> , 2 <sup>nd,</sup> and 3 <sup>rd,</sup>         | Sunday                   | 08/10/2023                     | Rabi al-Ula 23-1445                                     |
| Beginning of Final Exams of 4th year                                                       | Monday                   | 27/11/2023                     | Jumada al-Ula 13-1445                                   |
| Winter Vacation 4 <sup>th</sup> year                                                       | Saturday<br>to<br>Sunday | 16/12/2023<br>To<br>24/12/2023 | Jumada al-Akhirah 3-1445<br>To<br>Jumada al-Ula 11-1445 |
| Beginning of Industrial Training for 4 <sup>th</sup> year Batch 29                         | Monday<br>to<br>Friday   | 25/12/2023<br>30/12/2023       | Jumada al-Ula 12-1445<br>to<br>Jumada al-Ula 16-1445    |
| Winter Vacation 1 <sup>st</sup> , 2 <sup>nd,</sup> and 3 <sup>rd,</sup>                    | Saturday<br>to<br>Monday | 16/12/2023<br>to<br>01/01/2024 | Jumada al-Akhirah 3-1445<br>To<br>Jumada al-Ula 19-1445 |
| Beginning of Final Exams for 1st, 2nd, and 3rd years                                       | Tuesday                  | 02/01/2024                     | Jumada al-Ula 20-1445                                   |
| Beginning of Final Exams for M. Pharm 1st & 3rd Semester                                   | Saturday                 | 06/01/2024                     | Jumada al-Akhirah 24-<br>1445                           |
| Beginning of Re-sit Exams for 1st, 2nd, and 3rd years                                      | Sunday                   | 21/01/2024                     | Rajab 9 -1445                                           |
| End of Fal                                                                                 | I Semester               |                                |                                                         |
| Spring S                                                                                   | Semester                 |                                |                                                         |
| Beginning of 2nd Semester for 4th years                                                    | Tuesday                  | 02/01/2024                     | Jumada al-Akhirah 20 -<br>1445                          |
| Beginning of 2nd Semester for 1st, 2 <sup>nd</sup> , 3 <sup>rd</sup>                       | Monday                   | 22/01/2024                     | Rajab 10 -1445                                          |
| Commencement of Classes for M. Pharm 2nd Semester                                          | Saturday                 | 03/02/2024                     | Rajab 22-1445                                           |
| Beginning of Final Examination of 4th year                                                 | Monday                   | 11/03/2024                     | Ramadan 01-1445                                         |
| Beginning of Midterm Exams 1 <sup>st</sup> , 2 <sup>nd,</sup> and 3 <sup>rd,</sup>         | Sunday                   | 17/03/2024                     | Ramadan 07-1445                                         |
| Spring Vacation                                                                            | Monday<br>to<br>Sunday   | 01/04/2024<br>to<br>07/04/2024 | Ramadan 22-1445<br>to<br>Ramadan 28-1445                |
| Beginning of Hospital Training for 4 <sup>th</sup> year Batch 29                           | Monday                   | 15/04/2024                     | Shawwal 6-1445                                          |
| Beginning of Final Examinations for 1st, 2nd, and 3rd years                                | Monday                   | 20/05/2024                     | Dhul-Qi-dah 12-1445                                     |
| Beginning of Final Exams for M. Pharm 2nd Semester                                         | Saturday                 | 01/06/2024                     | Dhul-Qi-dah 24-1445                                     |
| Summer                                                                                     | Semester                 |                                |                                                         |



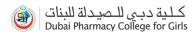
| Introductory Professional Practice Experience- Health care setting Exam (IPPE-02), 3rd year          | Friday                   | 07/06/2024                     | Dhul-Hijah 1-1445                             |
|------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------|-----------------------------------------------|
| Beginning of Introductory Professional Practice Experience - Health care setting (IPPE-02), 3rd year | Monday<br>To<br>Thursday | 10/06/2024<br>To<br>04/07/2024 | Dhul-Hijah 4-1445<br>To<br>Dhul-Hijah 28-1445 |
| Beginning of Industrial Training (INTR), 3rd year Batch 30                                           | Monday<br>to<br>Friday   | 08/07/2024<br>12/07/2024       | Muharram 2-1446<br>to<br>Muharram 6-1446      |
| Introductory Professional Practice Experience Exam, 2 <sup>nd</sup> year (IPPE-01)                   | Friday                   | 07/06/2024                     | Dhul-Hijah 1-1445                             |
| Beginning of Introductory Professional Practice Experience (IPPE-01), 2nd year (5 weeks)             | Monday                   | 10/06/2024                     | Dhul-Hijah 4-1445                             |
| Beginning of Summer Semester for 1st year                                                            | Monday                   | 10/06/2024                     | Dhul-Hijah 4-1445                             |
| Beginning of Final Examinations for 1st year                                                         | Monday                   | 8/07/2024                      | Muharram 2-1446                               |
| Beginning of Re-sit Exams for 1st, 2nd, and 3rd years                                                | Monday                   | 15/07/2024                     | Muharram 9-1446                               |
| Summer Vacation Begins                                                                               | Monday                   | 15/07/2024                     | Muharram 9-1446                               |

| Events               |                                                                  |  |  |
|----------------------|------------------------------------------------------------------|--|--|
| Event                | Date                                                             |  |  |
| Prophets Birthday*   | Wednesday, 27 of September 2023                                  |  |  |
| UAE National Day     | Friday - Sunday 1 <sup>st</sup> - 3 <sup>rd</sup> December, 2023 |  |  |
| New Year's Day       | Monday, 1st January 2024                                         |  |  |
| Eid Al Fitr Holiday* | Tuesday -Friday 9-12 April, 2024                                 |  |  |
| Eid Al Adha Holiday* | day* Saturday -Wednesday 15-19 June,2024                         |  |  |

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

<sup>\*\*</sup>Beginning of Academic Year 2024-2025 will be on Monday 26 August, 2024

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**Message from the Founder** 

#### Haji Saeed Bin Ahmed Al Lootah

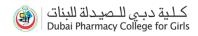
(1923-2020)

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

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

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

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





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

#### Foreword from the Dean

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

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

Dubai Pharmacy College for Girls is 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.

- A Chan



# **History of Dubai Pharmacy College for Girls**

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

| pharmaceut | 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 infrastructure of the library was enhanced to include newly-built study rooms to facilitate student learning.                                                                                                                                                                               |  |  |
| 2019-2021  | DPCG renewed/signed new MoUs with reputed healthcare organizations (Ref: DPCG Partnerships)                                                                                                                                                                                                     |  |  |



| DPCG Partnerships                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| PROFESSIONAL PRACTICE EXPERIENCE PARTNERS |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |
| ORGANIZATIONS                             | Description                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |
| Dubai Health Authority (DHA)              | <ul> <li>Undergraduate students in their last semester undertake and under course Hospital training in different hospitals of DHA.</li> <li>Postgraduate students undertake their Clinical Clerkship in their final year of study</li> </ul>                                                                                                                                                                                                      |  |  |
| Iranian Hospital- Dubai                   | <ul> <li>Undergraduate students in their last semester undertake and under course Hospital training</li> <li>Postgraduate students undertake their Clinical Clerkship in their final year of study</li> </ul>                                                                                                                                                                                                                                     |  |  |
| Cleveland Clinic Abu Dhabi<br>(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                           | <ul> <li>Postgraduate students undertake their Clinical Clerkship in their final year<br/>of study (applicable only for UAE nationals only in Al Qasimi Hospital, Al<br/>Baraha Hospital &amp; Fujairah Hospital)</li> </ul>                                                                                                                                                                                                                      |  |  |
| Thumbay Hospital- (GMU)-Ajman             | <ul> <li>Undergraduate students in their last semester undertake and under course Hospital training</li> <li>Postgraduate students undertake their Clinical Clerkship in their final year of study at Thumbay Hospital – Ajman.</li> </ul>                                                                                                                                                                                                        |  |  |
| 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                                                                                                                                                                                                                                                                                                                                                        |  |  |
| Fakeeh University Hospital                | <ul> <li>Undergraduate students at DPCG undergo hospital training in their final semester, allowing them to gain hands-on experience in a clinical setting and prepare for a career in pharmacy</li> <li>Postgraduate students at DPCG complete a 7-month Clinical Clerkship rotation during their final year of study to develop their clinical pharmacy skills and prepare for a successful career in the field of clinical pharmacy</li> </ul> |  |  |
| American Hospital                         | Undergraduate students at DPCG undergo hospital training in their final semester, allowing them to gain hands-on experience in a clinical setting and prepare for a career in pharmacy.                                                                                                                                                                                                                                                           |  |  |
| Saudi German Hospital                     | <ul> <li>Undergraduate students at DPCG undergo hospital training in their final semester, allowing them to gain hands-on experience in a clinical setting and prepare for a career in pharmacy</li> <li>Postgraduate students at DPCG complete a 7-month Clinical Clerkship rotation during their final year of study to develop their clinical pharmacy skills and prepare for a successful career in the field of clinical pharmacy</li> </ul> |  |  |



| Emirates Health Service (EHS)  Canadian Specialist Hospital  Althiqa Pharmacy Group                   | <ul> <li>Undergraduate students at DPCG undergo hospital training in their final semester, allowing them to gain hands-on experience in a clinical setting and prepare for a career in pharmacy.</li> <li>Postgraduate students at DPCG complete a 7-month Clinical Clerkship rotation during their final year of study to develop their clinical pharmacy skills and prepare for a successful career in the field of clinical pharmacy</li> <li>Undergraduate students at DPCG undergo hospital training in their final semester, allowing them to gain hands-on experience in a clinical setting and prepare for a career in pharmacy</li> <li>Community Pharmacy training for undergraduate students</li> </ul> |  |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 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<br>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<br>Jakarta                                                                | DPC and Universitas 17 Agustus 1945 Jakarta have common interest in field of pharmaceutical and life sciences education and research thus have a collaboration in the fields of academics, education and research.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| SVKM'S Dr. Bhanuben Nanavati<br>College of Pharmacy                                                   | DPC and SVKM'S Dr. Bhanuben Nanavati College of Pharmacy have common interest in field of pharmaceutical and life sciences education and research thus have a collaboration in the fields of academics, education and research.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| 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 Veterinary and Animal Sciences                                          | sciences education and research thus promoting academic and professional cooperation in training                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| (Uvas), Lahore, Pakistan University of Colorado SKAGGS School of Pharmacy and Pharmaceutical Sciences | DPC collaborates with University of Colorado SKAGGS School of Pharmacy and Pharmaceutical Sciences to provide studnets to clinical training                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |
| Professional Regulatory Affairs                                                                       | DPC partners with PRA to offer certificate courses in Regulatory Affairs,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |  |
| (PRA) Consultancy                                                                                     | Pharmacovigilance, etc.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|                                                                                                       | STUDENT EXPERIENCE                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| International Pharmaceutical Student Federation (IPSF).                                               | Students with the opportunity to explore numerous outreach activities, professional meetings, and student organization events.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |  |



#### **Vision**

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

#### **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 DecisionMaking Support, Dubai Police
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Department, Dubai Health Authority
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**Dr. Fatima Sultan Al Olama**Pediatrician, Champion of Women and
Children's Healthcare
Member, Board of Trustees



**Suwaidi**Chairman, Sharjah Economic Development
Department (SEDD)
Member, Board of Trustees

Mr. Sultan Abdullah Bin Hada Al



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

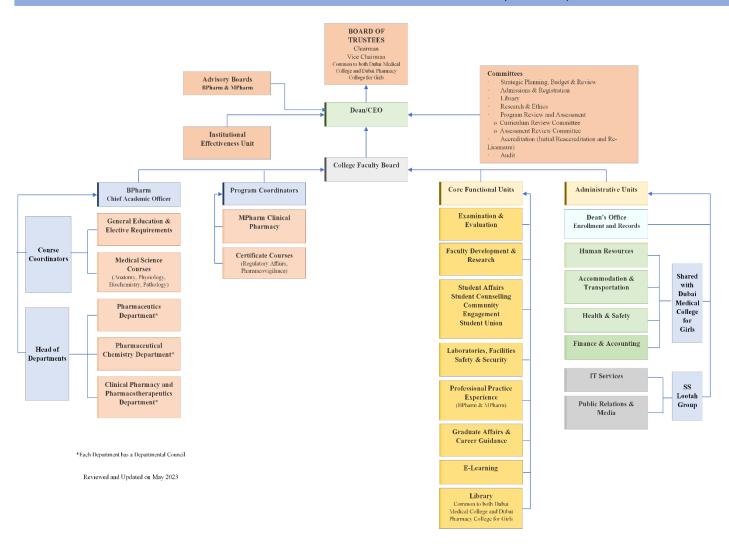


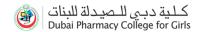
**Dr. Prof. Yousif El-Tayeb**Acting Dean, Dubai Medical College for Girls



# **Organizational Structure**

#### ORGANIZATIONAL CHART - DUBAI PHARMACY COLLEGE FOR GIRLS (AY 2023-2024)





# 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

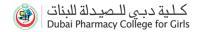
# 2. Admission Requirements

#### Admission requirements for BPharm program (AY2023-24).

- a. The applicant must complete a minimum of 12 years of school education.
- b. The applicant must pass any one of the following English Language Proficiency Tests with a minimum score as follows:
- 1100 in Emirates Standardized Language Test (EmSAT)
- 500 in TOEFL ITP (CBT 173 iBT 61)
- 5.0 in IELTS for Academic
  - c. Valid English Proficiency Score is mandatory before admission.
  - d. According to the educational systems the percentages will be as follow:

Table 1: Standardized high school for the students from Different Curriculum.

| Curriculum type                    | Percentages                                                                                                                                                   |
|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UAE curriculum                     | A minimum High School Average of 85% for Advanced Track or 80% for Elite                                                                                      |
| American Curriculum                | -A minimum High School Average of 85% with at least one AP or passing the EmSAT math (800), the students should submit grades 9,10,11,12.                     |
| UK: IGCSE/GCE                      | A minimum High School Average of 80% with 5 O levels, (at least 3 science subjects) and 2 science subjects A level.                                           |
| IB Diploma program                 | A minimum High School Average of 80% with 6 subjects at least 3 Science subjects (e.g., Biology, Chemistry, Physics or Mathematics)                           |
| Indian Central Board-<br>CBSE/ICSE | A minimum High School Average of 70% in science stream.                                                                                                       |
| Pakistan Bangladesh                | A minimum High School Average of 75% in science stream.                                                                                                       |
| Iranian Curriculum                 | A minimum High School Average of 83% in science stream.                                                                                                       |
| Canadian Curriculum                | A minimum High School Average of 80% in science stream.                                                                                                       |
| Qatar                              | A minimum High School Average of 85% in science stream.                                                                                                       |
| Saudia Arabia                      | A minimum High School Average of 85% in science stream.                                                                                                       |
| Iraq                               | A minimum High School Average of 80% in science stream.                                                                                                       |
| Egypt                              | A minimum High School Average of 80% in science stream.                                                                                                       |
| other non-UAE educational systems. | must have secured a minimum aggregate score equivalent to UAE 85% advanced track per International Grade Conversion Table published by World Education System |



#### e. Other requirements

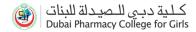
The admission committee must apply any of the following choices according to the applicant's case.

**Table 2: Other admission requirements** 

| 1.students inside UAE                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |
|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Choice 1: EmSATs                                | Must score at least 800 in EmSAT of Math and any Two sciences courses (Chemistry, Biology, Physics)                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Choice 2: internal exams                        | The internal exams were approved by CAA, the students must score 70% in Math and any of two sciences courses in internal exams (Chemistry, Biology, Physics). The applicant has three attempts. Each exam with 50 MCQs and will be at the same level of EmSAT questions. The exams will be two times per week                                                                                                                                                                                                                         |  |
| Choice 3: only applied for                      | Consider 80% or B grade or equivalent of Math and any                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| UAE system or IGCSE/GCE                         | two sciences courses (Chemistry, Biology, Physics)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |
| or IB Diploma program                           | 1 The students must pass English Language Profisions:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |
| 2.Students from other countries                 | 1.The students must pass English Language Proficiency Tests with a minimum score as follows: 500 in TOEFL ITP (CBT 173 – iBT 61) 5.0 in IELTS for Academic. 1100 in Emirates Standardized Language Test (EmSAT)  2. Internal exams: The internal exams were approved by CAA, the students must score 70% in any of three sciences internal exams (Chemistry, Biology, Math, Physics). The applicant has three attempts. Each exam with 50 MCQs and will be at the same level as EmSAT questions. The exams will be two times per week |  |
| 3. Transfer students from recognized university | 1. The students must submit a valid English Proficiency certificate or must pass English Language Proficiency Tests with a minimum score as follows: 500 in TOEFL ITP (CBT 173 – iBT 61) 5.0 in IELTS for Academic. 1100 in Emirates Standardized Language Test (EmSAT)                                                                                                                                                                                                                                                               |  |

#### f. The Interview Process

- Based on the CAA Standards 2019, applications (UAE/ other countries/ Transfer students) 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 members then review each screened application about the applicant's characteristics and qualifications.
- Based on this initial screening, 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 be conducted 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 the admission committee members and a faculty member who actively teach in the pharmacy program. All faculty members 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. 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.

#### 1. Recognition of Prior Learning/ Transfer students

- ➤ 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 the earlier part of the degree course in recognition of a candidate's success in her previous course of study. The following are the necessary conditions for transfer to the DPCG:
- > Dubai Pharmacy College for Girls (DPCG) accepts transfer of students from accredited College with a curriculum that is comparable to that offered at DPCG.
- > The student must provide a letter of application to the Dean of the College specifying reason (s) for requesting transfer and desired date of transfer.
- > Dubai Pharmacy College requires applicants to submit their transcripts for evaluation of transferable subjects /teaching hours from previous College experiences.
- > No student who has been dismissed from any institute will be eligible for transfer to DPCG.
- > All applicants must provide conduct certificates from the institute where they are currently enrolled.
- > Student applying for transfer to DPCG must study more than 60% of the syllabus of B. Pharm at DPCG.
- > All applicants should contact the Dean's office to inquire about having their transcripts reviewed.
- > 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 and the admission committee.
- > Transfer of students is not allowed after the second year.
- > Before considering any application for transfer, the 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**

- > Students must meet the English language proficiency requirements as set by the Ministry of Higher Education- Higher Education Affairs, UAE.
- > 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).
- ➤ Before attending Dubai Pharmacy College, attested records from the previous College and higher secondary school should be submitted to Head Enrollment and Records.
- > The applicant will be accepted after the Interview with the admission committee.

#### 2. BPharm Conditional Admission

Students are admitted conditionally when they need to get the equivalency certificate.



#### **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.

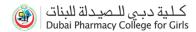
\*Note: School certificates from outside UAE should be attested from a place of issue:

#### 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

| <b>STUDENT INTAKE:</b> Student intake will be limited to 50 students not exceeding 60 students in total. |                                                                                                                                                                                                     |                                                     |  |  |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|--|--|
| Fees                                                                                                     | Total Amount/Year                                                                                                                                                                                   | Mode of Payment                                     |  |  |
| Tuition*                                                                                                 | <ul> <li>Dhs 45,000/- (+5% VAT applicable) per year (Semester 1- Semester 8)</li> <li>Dhs 25000/- (+5% VAT applicable) – (Semester 9)</li> <li>Dhs 1350/credit hour (+5% VAT applicable)</li> </ul> | Dhs 22,500/- at time of admission Four installments |  |  |
| Hostel                                                                                                   | 12000 Dhs Sharing rooms<br>15000 Dhs Normal room<br>18000 Dhs Super room<br>500 hostel insurance                                                                                                    | Four installments with tuition fees.                |  |  |
| Transportation (+5% VAT a                                                                                | Transportation (+5% VAT applicable)                                                                                                                                                                 |                                                     |  |  |
| Dubai(daily)                                                                                             | Muhaisnah/Mizhar/Mirdiff/Rashidiya/Twar/Qus<br>ais/Nahda Dhs3000/-<br>Deira/Bur Dubai/Satwa/Karama/Umm<br>Suqaim/Jumeirah/Barsha Dhs4000/-                                                          | Four installments with tuition fees.                |  |  |
| Sharjah/Ajman(daily)                                                                                     | Dhs 5000/-                                                                                                                                                                                          |                                                     |  |  |
| Abu Dhabi, Fujairah, Al Ain,<br>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 year of study. Transport and Hostel fees are subject to change.

#### Financial aid

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

Scholarships will be provided to meritorious students as per the Institutional Policies.

Note: these scholarships and financial aid 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.** 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.
- 3. Consistently obtaining not less than Excellent (grade) at all levels of studies.



**4.** 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:**

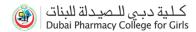
Students in good standing may request a Leave of Absence. A leave of absence allows a student to return to the same semester at any registration period for up to one year from the start of the leave without the necessity of re-applying but should fill in the Leave of Absence form. Students on scholarship 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

#### **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.

|         | VOI K.                               |                                                                                                         |  |  |  |  |  |
|---------|--------------------------------------|---------------------------------------------------------------------------------------------------------|--|--|--|--|--|
|         | .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 Course                                      | Quantitative<br>reasoning | Communicatio<br>n skills | Ethical<br>reasoning | Technology<br>and<br>Information<br>literacy | Diverse perspectives and experiences | Critical Inquiry | Wellness<br>literacy | Innovation and<br>Design<br>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 outcome |  |    |    |    |    |    |    |    |

# 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.

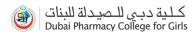
|   | GER <b>Learning Outcome</b>       |                                                                                                   | General education requirement courses aligned to the GER-LOS | GER effectiveness<br>assessment in B-<br>Pharm program                                 | Indirect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



| 2 | Communi<br>cation<br>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                                                                         | <ul> <li>Faculty-External examiner satisfaction survey</li> <li>Plagiarism report</li> <li>Number of students participating in DUPHAT</li> <li>Number of prizes won in DUPHAT.</li> </ul> | <ul> <li>80%         Faculty-         External         examiner         satisfaction</li> <li>100% of         students         should         comply         with DPC         plagiarism         policy (</li> <li>All fourth         year         students'         participatio         n in         DUPHAT</li> <li>Number of         prizes won         in DUPHAT         in different         categories.</li> </ul> |
|---|-----------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 | Ethical<br>reasonin<br>g    | Assess and weigh moral beliefs and practices, and their applications to ethical dilemmas            | GE704 Islamic<br>Studies<br>GE707 Green &<br>Sustainable<br>Pharmacy                                                       | Report submitted by the HOD from clinical pharmacy & pharmacotherapeutics & Pharmaceutics department. | Academic Integrity     Number of Cheating cases in Exams     Disciplinary Reports                                                                                                         | <ul> <li>Zero tolerance</li> <li>Zero tolerance- (report from student affairs on attendance ,)</li> </ul>                                                                                                                                                                                                                                                                                                                 |



| 4 | Technolo<br>gy and<br>Informati<br>on<br>literacy  | Locate,<br>evaluate,<br>cite, and<br>effectively<br>using<br>information                                                    | GE703<br>Computer<br>Applications<br>GE710<br>Innovation and<br>Entrepreneursh<br>ip                                                                                                                                        | Capstone project report                                          | <ul> <li>Faculty satisfaction survey-</li> <li>Plagiarism report</li> </ul>                                          | 80% of the students satisfied with IT skills and referencing skills      100% of students should comply with DPC plagiarism policy. |
|---|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| 5 | Diverse<br>perspecti<br>ves and<br>experienc<br>es | Acquire<br>knowledge<br>and<br>analytical<br>skills to<br>understand<br>a variety of<br>perspectives<br>and<br>experiences. | GE705 History<br>of Pharmacy<br>GE707 Green &<br>Sustainable<br>Pharmacy<br>GE709 UAE<br>Society                                                                                                                            | EC7011 -<br>Organizational<br>Behavior and Cultural<br>Diversity | <ul> <li>Number of students participating in Global Day</li> <li>Number of students participating in IPSF</li> </ul> | <ul> <li>Student<br/>satisfaction<br/>with Global<br/>day</li> <li>Overall<br/>student<br/>participatio<br/>n in IPSF</li> </ul>    |
| 6 | Critical<br>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<br>literacy                     | Acquire<br>knowledge<br>in science-<br>based<br>health<br>fitness and<br>aesthetic<br>concepts.         | GE706 Positive<br>Psychology<br>GE707 Green &<br>Sustainable<br>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<br>n and<br>Design<br>Thinking | Explore how to generate creative ideas using mindsets and practices exhibited by successful innovators. | GE709 UAE<br>Society<br>GE710<br>Innovation and<br>Entrepreneursh<br>ip  | Community engagement projects                     | • | Number of innovative start-ups                                      | • | Track<br>innovative<br>start-ups<br>by DPC<br>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.

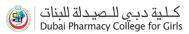
| BPharm Program Objectives mapping against Program Outcomes                                                                                                                            |                  |    |    |        |          |    |              |            |    |           |    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|----|----|--------|----------|----|--------------|------------|----|-----------|----|
| Program objectives                                                                                                                                                                    | Program outcomes |    |    |        |          |    |              |            |    |           |    |
|                                                                                                                                                                                       | Knowledge        |    |    | Skills |          |    | Competencies |            |    |           |    |
|                                                                                                                                                                                       | A1               | A2 | А3 | A4     | B1       | B2 | В3           | <b>C</b> 1 | C2 | <b>C3</b> | C4 |
| <b>1.</b> Offer a highly motivated educational environment to provide the students with profound knowledge of various fundamental, pharmaceutical and clinical sciences.              | √                | √  | √  | √      |          |    |              |            |    |           |    |
| <b>2.</b> Develop the ability of the students to utilize the acquired knowledge to contribute productively in various fields of pharmaceutical and clinical settings.                 |                  |    |    |        | √        |    | √            |            |    |           |    |
| <b>3.</b> Produce graduates with professional skills needed to ensure effective communication with health care members, patients and community following professional code of ethics. |                  |    |    |        |          | √  |              |            |    |           |    |
| <b>4.</b> Develop a highly competent, responsible, life-long learner pharmacist with the vision of continuous professional development.                                               | tinuous          |    |    |        | <b>√</b> | √  |              |            |    |           |    |



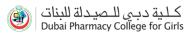
|                           |                                                                                                                                                                                                                                                                                                     | 5.B PROGRAM OUTCOM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | MES                                 |                                                                                           |                                                                                                            |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| QF<br>Emirates<br>Level 7 | Program outcome:  On successful completion of this program, the students will be able to:                                                                                                                                                                                                           | Course Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | CAPE<br>Educational<br>Outcomes     | Learning/<br>Teaching<br>Methods and<br>Strategies                                        | Types/<br>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 II -Medicinal Chemistry III -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 Learning, | Written Examinations, MCQ, Practical Reports, Practical Exam Project Report, Poster, Quiz, Case discussion |
|                           | <b>A2.</b> Apply the knowledge of the basic concepts and techniques required to formulate different pharmaceutical and biotechnology-based products and implement quality control measures and tests to produce an effective and safe medicine.                                                     | -Instrumental Analysis Natural Medicines, Safety and Efficacy, -Introduction of Pharmacy -Pharmaceutics-I -Pharmaceutics-II - Pharmaceutical Technology -Pharmaceutical Biotechnology                                                                                                                                                                                                                                                                                                                                          | -Learner<br>- Innovator             | Eearning, 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<br>Learner<br>-Promoter |                                                                                           |                                                                                                            |



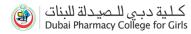
|        | A4. Demonstrate specialist and comprehensive knowledge required in providing specialized Clinical services needed in hospital and other clinical environments.                               | -Professional Skills in Practice Positive Psychology -Green & Sustainable Pharmacy  -Pharmaceutical Administration and Pharmacoeconomics -Pharmacology and Pharmacotherapeutics - I, II, III, IV & V -Pharmacy Automation & Informatics -Professional Skills in Pharmacy , -Pharmacy Practice -IPPE                                                                                                                                                                                                                                                                                                                                                | -Self -aware                                                                                                                                     |                                                                                                                                  |                                                                                                                                                                                                   |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Skills | <b>B1.</b> Design educational strategies for prevention and intervention in disease management for individuals and communities to improve health and wellness                                | -APPE -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<br>-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, |
|        | <b>B2</b> . Communicate effectively orally and in writing and deploy a range of presentation techniques and strategies to present, explain and assess information within workplace settings. | -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 -Pharmaceutical Technology -Biopharmaceutics and Pharmacokinetics -Biochemistry -Clinical Biochemistry -Anatomy and Physiology II -Pathology -Pharmacy Practice -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                                                                                                                                                                         |



|                             | <b>B3.</b> Identify problems, analyze, deploy and utilize pertinent information in clinical case discussion and evaluate the patient care process with an appropriate pharmaceutical care 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 |                                                                                                                 |                                                                                                                                                                                    |                                                                                                                                                                                                                        |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aspect in<br>Competen<br>ce | C1. (Autonomy and Responsibility)  Demonstrate the leadership ability to be innovative by using creative thinking and take responsibilities to function both independently and as a healthcare team member. | -Pharmaceutics-I -Pharmaceutics-II -Pharmaceutical Biotechnology -Pharmaceutical Technology -Natural Medicines, Safety and Efficacy -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                                                         | Prescription<br>evaluation, PBL,<br>Workshops, Role<br>play, Case studies,<br>Presentation, IPPE,<br>APPE, INT. | PPE evaluation and exam, OSCEs, Calculations in Practice exam, Presentation, Capstone course evaluation, Capstone Project evaluation, Oral presentation, Presentation assessments, | Course Level: Couse 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)  Develop self-direction in problem-solving, decision-making, and critical thinking abilities                                                                                          | - Medicinal Chemistry I, II & III -Pharmaceutics-I -Pharmaceutics-II -Pharmaceutical Biotechnology                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | -Problem solver<br>-Lifelong<br>learner,                                                                                           |                                                                                                                 |                                                                                                                                                                                    | spent on homework                                                                                                                                                                                                      |



| for professional development and become          | -Pharmaceutical Technology                                                        | -Educator and | 6. Focus group        |
|--------------------------------------------------|-----------------------------------------------------------------------------------|---------------|-----------------------|
| 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 in         |
|                                                  | -Capstone project                                                                 |               | DUPHAT                |
|                                                  | Elective Courses Area III & IV                                                    |               | 8.Number of           |
|                                                  | -Medical &Pharmaceutical Terminology and Information Literacy<br>-Islamic Studies |               | Cheating cases        |
|                                                  | -Innovation and Entrepreneurship                                                  |               | in Exams              |
|                                                  | innovation and Entrepreneursing                                                   |               | 9.Number of           |
| C3. (Role in Context)                            | -Introduction of Pharmacy                                                         | -Professional | students              |
| Exhibit Islamic behavior, moral and ethical      | -Pharmacy Practice                                                                | and ethical   | participating in      |
| 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                                                  |               |                       |
| providers, and society.                          | -Research Methodology & Biostatistics                                             |               |                       |
|                                                  | -Pharmacy Laws and Drug Regulations                                               |               | <u>Program Level:</u> |
| C4. Practice Pharmaceutical Care Process in      | -Pharmacoepidemiology & Pharmacovigilance                                         |               | 1.Employer or         |
| individualized and population-based care.        | -Clinical Toxicology                                                              |               | alumni surveys        |
|                                                  | -Research Methodology and Biostatistics                                           |               | 2.Student             |
|                                                  | -Capstone course                                                                  |               | perception            |
|                                                  | -Professional Skills in Pharmacy Practice                                         |               | surveys               |
|                                                  | -IPPE & APPE                                                                      |               | 3.Job placement       |
|                                                  | -Elective courses: Area I                                                         |               | ratio.                |
|                                                  | -Islamic Studies                                                                  |               | 4.Graduates           |
|                                                  | -History of Pharmacy                                                              |               | completion rate       |
|                                                  | -UAE Society                                                                      |               | 5.Annual              |
|                                                  |                                                                                   |               | reports               |
|                                                  |                                                                                   |               | including             |
|                                                  |                                                                                   |               | benchmarks            |
|                                                  |                                                                                   |               | with national         |
|                                                  |                                                                                   |               | and                   |
|                                                  |                                                                                   |               | international         |
|                                                  |                                                                                   |               | institution.          |
|                                                  |                                                                                   |               | 6. Preceptors'        |
|                                                  |                                                                                   |               | satisfaction          |
|                                                  |                                                                                   |               | survey                |
|                                                  |                                                                                   |               | 7. Faculty-           |
|                                                  |                                                                                   |               | External              |



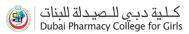
|  |  |  | examiner satisfaction survey 8. Number of students participating in DUPHAT 9.Number of prizes won in DUPHAT. 10. Disciplinary Reports. 11.Graduate destination survey results questionnaire 12. Number of Cheating cases in Exams |
|--|--|--|-------------------------------------------------------------------------------------------------------------------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

# **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.

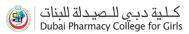
The new program in DPCG encompasses with different disciplines of pharmaceutical sciences and clinical sciences. This program provides students with a concrete base of pharmacy knowledge, skills and competencies which make them capable of work in different clinical settings of pharmacy field.



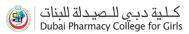
Students graduating from B. Pharm program should be able to ascertain following competencies:

| <u>S.</u> | Graduate<br>Competencies | <u>Description</u>                                                                                                                                                                                                                                                                                                                   | Course Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Learning/<br>Teaching Methods and<br>Strategies                                                                                                                     | Types/<br>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, Pharmaceutical Technology, | 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 |

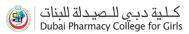
|    |                                       |                                                                                                                                                                                                                                       | Pharmaceutics I, GMP, 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<br>Self reflection of<br>competencies<br>achievement.<br>Couse evaluation<br>by IE.<br>Preceptors'<br>satisfaction<br>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<br>Education<br>Role play                                                                                                    | APPE-<br>Competency<br>evaluation form<br>Project learning<br>by doing,<br>Preceptors'<br>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 |



|    |                                                              |                                                                                                                                                                                     | -Green &<br>Sustainable<br>Pharmacy                                                                                                                                                                                                                                         |                                                                                                                                                                              |                                                                                                                          |                                                                                                                          |
|----|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 4. | Health and Wellness<br>Promotion<br>(Promoter)               | Develop prevention, screening, intervention, and educational strategies for individuals and communities to maintain and improve health and wellness and to manage chronic diseases. | Professional Skills in Practice. Pharmacology and Therapeutics I, II, III, IV & V. IPPE 01, 02 APPE Biopharmaceutics and Pharmacokinetics. Social and behavior aspects in pharmacy; Clinical Toxicology, Pharmacy practice                                                  | Lectures, Practical, Problem Based Learning, Case presentations, Self-Directed learning, Experiential Education Role play                                                    | IPPE 01 APPE- Competency evaluation form Presentation evaluation OSCE, Preceptors' evaluation                            | Student Portfolio Self reflection of competencies achievement Preceptors' satisfaction survey 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<br>Self-reflection of<br>competencies<br>achievement<br>Preceptors'<br>satisfaction<br>survey          |



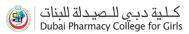
|    |                                                         |                                                                                                                                                                 | -Innovation and<br>Entrepreneurship                                                                                                                                                                                                                                                 |                                                                                                                                                     |                                                                              |                                                                                                                                                     |
|----|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 6. | Educator<br>(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 & Pharmacovigilance Pharmacy practice Medical & Pharmaceutical 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<br>(Advocate)                          | Assure that patients' best interests are represented and consider patient experience.                                                                           | Professional Skills<br>in Pharmacy<br>Practice,<br>Pharmaceutical<br>care<br>IPPE 01, O2<br>APPE                                                                                                                                                                                    | Demonstrations,<br>Case presentations,<br>Portfolio,<br>Experiential<br>Education<br>Role play                                                      | OSCE<br>APPE-<br>Competency<br>evaluation form,<br>Preceptors'<br>evaluation | Student Portfolio<br>Self reflection of<br>competencies<br>achievement,<br>Health awareness<br>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<br>in Pharmacy<br>Practice,<br>Pharmaceutical<br>care<br>IPPE 01, 02, INT                                                                                                                                                                                       | Case presentations, Demonstration, Portfolio, Experiential Education Role play                                                                      | OSCE<br>APPE-<br>Competency<br>evaluation form<br>Preceptors'<br>evaluation  | Student Portfolio<br>Self reflection of<br>competencies<br>achievement<br>Number of<br>students                                                     |



|     |                                 |                                                                                                                                                 | APPE Social and behavior aspects in pharmacy.                                                                                                                                                                                                                       |                                                                                                                            |                                                                                                                                                                                                             | participating in<br>IPSF, Health<br>awareness<br>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,<br>Portfolio,<br>Experiential<br>Education<br>Role play                                                     | OSCE<br>APPE-<br>Competency<br>evaluation form<br>Preceptors'<br>evaluation                                                                                                                                 | Student Portfolio<br>Self reflection of<br>competencies<br>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 examiner evaluation External evaluator in conferences |



|     |                                                           |                                                                                                                                                                                              | Terminology and<br>Information<br>Literacy<br>- Computer<br>Applications<br>- Arabic Language<br>Skills                                         |                                                                                         |                                                                                                                  |                                                                                                                 |
|-----|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 11. | Professional Statistics<br>& calculations<br>(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,<br>Tutorials,<br>Practical,<br>Problem Based<br>Learning,<br>Demonstration,   | Short answer questions; Essay type questions, Multiple Choice questions. Capstone project evaluation forms       | External<br>examiner<br>evaluation                                                                              |
| 12. | Self-Awareness<br>(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<br>Presentations,<br>Demonstration,<br>Portfolio,<br>Experiential<br>Education  | Seminar presentations assessment , Case presentations evaluation, mid and end competencies Preceptor Evaluation, | Student Portfolio<br>Self reflection of<br>competencies<br>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 Pharmacoepidemi ology & Pharmacovigilance                                 | Workshop<br>presentations,<br>Demonstration,<br>Portfolio,<br>Experiential<br>Education | presentations assessment, Case presentations evaluation, mid and end competencies Preceptor Evaluation,          | Student Portfolio<br>Self reflection of<br>competencies<br>achievement<br>Extracurricular<br>activities by IPSF |



| 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<br>evaluation forms<br>presentations<br>assessment,<br>Case<br>presentations<br>evaluation<br>Preceptor<br>Evaluation, | Student Portfolio<br>Self reflection of<br>competencies<br>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<br>Self reflection of<br>competencies<br>achievement<br>Plagiarism<br>Cheating in exam |
| 16. | Research &<br>Scholarship (Scholar)                 | Engage in research and scholarly activities related to the healthcare and pharmaceutical practice.                                                         | Research<br>Methodology and<br>Biostatistics<br>Capstone Project<br>IPPE 01, 02<br>APPE<br>Pharmacy practice                                                                                  | Experiential<br>Education<br>Capstone Project<br>evaluation                                        | No. of student<br>publications<br>from Capstone<br>project.<br>No. of students<br>in conference<br>presentation.                        | Student<br>perception<br>surveys<br>Employer or<br>alumni surveys<br>No. of winner in<br>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.

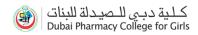
Dubai Pharmacy College for Girls grants its students, after successful completion, Bachelor's Degree in Pharmacy (B. Pharm.). The total program of Dubai Pharmacy College for Girls extends over four and half academic years and the maximum course duration to complete the degree within a reasonable time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

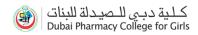
|                                                                                       | No. of Courses | Credit Hours | %     |
|---------------------------------------------------------------------------------------|----------------|--------------|-------|
| Elective Courses                                                                      | 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 2023-2024 |                                                              |              |             |         |           |                    |  |
|                |                         | 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 Semes                                                 | ter          |             |         |           |                    |  |
| Code           | Domain                  | Courses                                                      | Prerequisite | Corequisite | Lecture | Practical | <b>Total Units</b> |  |
| GE708          | GE                      | Arabic Language Skills                                       |              | -           | 2       | -         | 2                  |  |
| GE709          | GE                      | UAE Society                                                  |              | -           | 2       | -         | 2                  |  |
| EC7011/ EC7012 | EC                      | Elective Area I                                              |              | -           | 2       |           | 2                  |  |
|                |                         | Total                                                        |              |             | 6       | -         | 6                  |  |

|          |                                       | Total                                         |                  |               | 6       | -           | 6           |
|----------|---------------------------------------|-----------------------------------------------|------------------|---------------|---------|-------------|-------------|
|          |                                       | Academic Yea                                  | ar 2024-2025     |               |         |             |             |
|          |                                       | SECONI                                        | D YEAR           |               |         |             |             |
|          |                                       | Fall Ser                                      | 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                                 |                                               |                  |               |         | 3           | 17          |
|          |                                       | Spring S                                      | emester          |               |         |             |             |
| 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           |
| <u>-</u> | · · · · · · · · · · · · · · · · · · · | TOTAL                                         |                  | <u>-</u>      | 13      | 4           | 17          |
|          |                                       | Introductory Professional Practice            | Experience (Summ | ner Semester) |         |             |             |
| Code     | Domain                                |                                               | No of Hours      |               | No of C | redit Hours | ;           |
| IPPE-01  | CS                                    | Introductory Professional Practice Experience | 200              |               |         | 5           | •           |



|               |                 |                                                                   | Academic Year 2025-2    | 026            |         |              |                    |  |  |
|---------------|-----------------|-------------------------------------------------------------------|-------------------------|----------------|---------|--------------|--------------------|--|--|
|               |                 |                                                                   | THIRD YEAR              |                |         |              |                    |  |  |
|               |                 |                                                                   | Fall Semester           |                |         |              |                    |  |  |
| Code          | Domain          | Courses                                                           | Prerequisite            | Corequisite    | Lecture | Practical    | <b>Total Units</b> |  |  |
| 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<br>Medicines                        | CP702, CP705, MC705     | -              | 2       | -            | 2                  |  |  |
| CP709         | GE/CS           | Research Methodology and<br>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<br>Medicine                          | CP706                   | CP710          | 3       | -            | 3                  |  |  |
| EC7021/EC7022 | EC              | Elective Area II                                                  |                         |                | 2       |              | 2                  |  |  |
| CP713         | <mark>CS</mark> | Hospital Pharmacy                                                 | CP707, CP710            |                | 2       | <u>-</u>     | 2                  |  |  |
|               |                 | TOTAL                                                             |                         |                | 13      | 2            | 15                 |  |  |
|               |                 | Professional                                                      | Practice Experience (Su | mmer Semester) |         |              |                    |  |  |
| Code          | Domain          |                                                                   | No of H                 | ours           | No o    | of Credit Ho | urs                |  |  |
| IPPE-02       | CS              | Introductory Professional Practice Experience-Health care setting | 120                     |                |         | 3            |                    |  |  |
| (INTR)        | PS              | Industrial Training                                               | 40                      |                |         | 1            |                    |  |  |

|                   |                 | Academic Yea                                        | r 2026-2027                                                         |             |         |           |             |  |
|-------------------|-----------------|-----------------------------------------------------|---------------------------------------------------------------------|-------------|---------|-----------|-------------|--|
|                   |                 | FOURTH                                              |                                                                     |             |         |           |             |  |
| Fall Semester     |                 |                                                     |                                                                     |             |         |           |             |  |
| Code              | Domain          | Courses                                             | Prerequisite                                                        | Corequisite | Lecture | Practical | Total Units |  |
| GE710             | <mark>GE</mark> | Innovation and Entrepreneurship                     | -                                                                   |             | 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 ,<br>CP708, CP711                               | CP717       | 3       | 1         | 4           |  |
| EC7031/EC<br>7032 | EC              | Elective Area III                                   |                                                                     |             | 2       |           | 2           |  |
|                   |                 | TOTAL                                               |                                                                     |             | 14      | 2         | 16          |  |
|                   |                 | Spring So                                           | 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,<br>CP708, CP710, CP711,<br>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<br>7042 | EC              | Elective area IV                                    |                                                                     |             | 2       |           | 2           |  |
|                   |                 | TOTAL                                               |                                                                     |             | 9       | 6         | 15          |  |



|      | Advanced Professional Practice Experience (Fall semester) 2027-2028                  |                                           |     |    |  |  |  |  |
|------|--------------------------------------------------------------------------------------|-------------------------------------------|-----|----|--|--|--|--|
| Code | Code Domain Advanced Professional Practice Experience No of Hours No of Credit Hours |                                           |     |    |  |  |  |  |
| APPE | CS                                                                                   | Advanced Professional Practice Experience | 640 | 16 |  |  |  |  |

| 7. Courses of Stu                                              | ıdy ir | 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                    | 1  |
| EC7021 - Nuclear Pharmacy                                      |        | Pharmacoepidemiology & Pharmacovigilance Pharmacology | 2  |
| 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 Description

#### **GENERAL EDUCATION**

Mathematics and Statistics Course Code: GE701 Credit Hours: 2+0

The course will introduce basic mathematical concepts and calculations required for the subsequent studies of pharmaceutical and clinical calculations. The course includes introduction of critical mathematical concepts through the development of mathematical techniques such as measurement systems and logarithms. Students will be equipped with the skills needed to apply mathematical techniques correctly. Moreover, statistical concepts will be introduced helping students to understand statistical concepts such as collection of data, data types, analysis of data and sampling techniques.

Medical &Pharmaceutical Terminology and Information
Literacy

Course Code: GE702

Credit Hours: 2+1

Medical & pharmaceutical Terminology is the study of the rules of medical and pharmaceutical word building. Students receive a thorough grounding in basic Medical & pharmaceutical terminology through a study of root words, prefixes, suffixes, and abbreviations. The study also focuses on correct pronunciation, spelling, abbreviations and use of medical & pharmaceutical terms. By the end of this course learners will be expected to have a basic comprehension of medical & pharmaceutical terms and be able to communicate accurately to the peers in the field. The course is also designed to enable students skillfully analyze, evaluate, access, apply and synthesize information rather than merely memorizing and repeating it. This would help in the development of their critical thinking skill to solve problems, make decisions, and deal effectively with social, scientific and practical problems of their academic, non – academic and professional lives. The course helps in making students lifelong learners.

Computer Applications Course Code:: GE703 Credit Hours: 0+2

The aim of this course is to provide students, the ability to access e-learning tools with the help of the Learning Management System to facilitate remote online learning. It will provide students, the ability to format and document text, numeric data, referencing methods, presentation skills using MS. office applications while using technology to support educational goals and reinforcing skills that help them to demonstrate the responsible use of technology and an understanding of ethics and safety issues in using electronic media.

Islamic Studies Course Code: GE704 Credit Hours: 2+0

This Islamic studies course aims to give the students a comprehensive understanding of the main two sources of Islamic Legislation: Holy Qur'an and sunnah (Prophet Mohamed Hadith). This course deals with the definition of the Holy Qur'an with an explanation of selected Qur'anic verses, the definition of Sunnah with an explanation of selected Prophet's sayings (Hadith), study sections of the biography of the prophet (PBUH), and the definition of schools of jurisprudence and the reasons for their differences, with an indication of the most important sources and references of Islamic studies.

History of Pharmacy Course Code: GE705 Credit Hours: 1+0

This course introduces the student to the profession of pharmacy and the role of the pharmacist within health care delivery systems, it gives a preview of the history of pharmacy and the different historical Eras, the important contributions of the ancient people and cultures to the evolution of the profession. Also, it describes the legislative, ethical, and professional standards in which the profession of pharmacy operates.

Positive Psychology Course Code: GE706 Credit Hours: 2+0

The proposed course aims at enriching the students regarding a positive aspect of human nature. Positive Psychology concentrating on optimal human functioning what makes people happier, more productive, and more successful, and relationship between psychological wellbeing and an able to Build happiness through Increase positive emotions, Develop More Resilience of Being Prepared to Set priorities and goals building skills needs to be a way of life. Creates personal growth identifying sources of stress in life and coping through practicing mindfulness. It also introduces students to the personality, personality types that related to happiness and the relationship between happiness, human connections, and social qualities, such as compassion, cooperation, mindfulness, and Gratitude. It also covers subjective state of well-being, optimism and emotional intelligence that facilitates the development of human resource in any society. In the course, students will have the opportunities to reflect on their life experiences and



will be encouraged to apply the learned skills and attitudes to contribute to their present and future life contexts, such as family, schools, communities, and workplaces.

#### **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 course is to achieve advanced language proficiency in the 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 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)**

#### **Research Methodology& Biostatistics**

**Course Code: CP709** 

Credit Hours:1+1

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 & Immunology Course Code: MC704 C

Credit Hours: 3+1

The aim of this course is to establish the student's basic understanding in the principles of microbiology and immunology. This course delivers information about different microbial species that cause human disease such as bacteria, fungi, and viruses and discusses current topics including antibiotic resistance and public health threats. Various issues related to sterilization & sterility-testing of pharmacopeial preparations will also be reviewed. The course also provides the student an understanding of immune system, important theories of immunology and the different types of failures of immune system. Laboratory focuses on the fundamental microbiological techniques.

Pathology Course Code: MC705 Credit Hours: 2+0

The course provides the students with the basic knowledge and conceptual understanding of the pathology of various diseases. Thus the student will be familiar with the names, classification, pathogenesis and pathological changes in the various body tissues in different diseases.

#### **PHARMACEUTICAL SCIENCES (PS)**

#### Pharmaceutical Organic Chemistry- I

**Course Code: PN701** 

Credit Hours: 2+0

This course describes the structure of atoms, atomic orbital, hybridization, types of chemical bonding, the polarity of bond and its relationship with the electronegativity of the element. It also covers the reaction mechanism involves homolytic and heterolytic bond cleavages in a chemical reaction, production of free radicals and their stability. This course also describes the resonance structure, substituents effect on the resonance, types of isomerism and their effect on the optical activity of organic molecules.

#### **Pharmaceutical Organic Chemistry- II**

Course Code: PN702

Credit Hours: 2+1

This course describes the structural configuration, nomenclature, physical properties, preparation methods, and chemical reactions/reaction mechanism of different functional groups as an aliphatic, aromatic hydrocarbon, substituted hydrocarbons, polynuclear hydrocarbons, esters, ethers, thioethers, alcohols, carboxylic acids, aldehydes, ketones, amines, diazonium salts and heterocyclic compounds. Laboratories include identification of functional groups of different organic molecules and preparation of selected organic compounds, their separation, purification and identification.

#### **Medicinal Chemistry-I**

**Course Code: PN703** 

Credit Hours: 3+0

Medicinal chemistry is the application of chemistry in the context of human medicine. This course describes the physiochemical, stereo-chemical aspects of drug action and biotransformation chemical reactions of phase I and phases II. This course also describes the chemistry of pharmacophore and structure-activity relationship of several classes of drugs that affecting the cardiovascular system (cardiac glycosides, antianginal, antiarrhythmic and antilipidemic agents, anticoagulants, antiplatelets, and diuretics), cholinergic, adrenergic neurotransmission, and stimulating central nervous system. In this course, a student will gain knowledge about how the structure of a drug relates to its intermolecular drug-receptor interactions/biological activity and metabolism. Students will also gain knowledge about drug designing and synthesis of different classes of medicinal agents.

Medicinal Chemistry-II Course Code: PN704 Credit Hours: 2+1

This course describes the medicinal chemistry of centrally acting drugs that includes opiate analgesics, nonsteroidal anti-inflammatory agents analgesic-antipyretics, sedatives-hypnotics, antiepileptics, general anaesthetics, psychotherapeutic drugs, antiparkinsonian and skeletal muscle relaxant. It also describes the drugs that affect neuronal transmission as local anaesthetics. In this course student will gain knowledge about how the structure of a drug relates to its physicochemical properties, intermolecular drug-receptor interactions lead to pharmacological activity and metabolism. Students will also gain knowledge and skills about drug designing, synthesis and analysis of different classes of medicinal agents.

#### 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.

Instrumental Analysis Course Code: PN706 Credit Hours: 2+1

This course is an introduction to modern instrumental methods of chemical and pharmaceutical analysis. It describes the theory of operation, instrument design and methodology, and applications of spectroscopic techniques of UV/VIS, Fluorescence, FTIR, AAS, MS, and NMR, and chromatographic methods that include gas and liquid chromatography. Laboratory includes the application of instruments in the analysis of chemicals, drugs, supplements and medicinal agents.

Introduction to Pharmacy PC701 Credit Hours: 1+0

This course introduces basic concepts in pharmaceutics including briefing the different dosage forms, routes of drug administration, prescription, labelling of medications and pharmaceutical Latin abbreviations. Besides, the course teaches extemporaneous dispensing and the fundamentals in the calculation of concentration expressions.

Pharmaceutics-I Course Code: PC702 Credit Hours: 3+1

The course is designed to provide the students with the theoretical and practical principles of the pharmaceutical dosage forms concerning their advantages and limitations, types and functions of excipients, preparation techniques, formulation strategies, and final product packaging and stability. The course deals with liquid dosage forms as aqueous and non-aqueous solutions, suspensions, emulsions, and sterile parenteral and ophthalmic dosage forms. The basic physical characteristics and calculations required in the formulation of the mentioned dosage forms are also discussed. Besides, students are initially exposed to modern formulation technology and innovations in pharmaceutical dosage forms and drug delivery systems.

Pharmaceutics-II Course Code: PC703 Credit Hours: 3+1

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

#### Biopharmaceutics and Pharmacokinetics Course Code: PC704 Credit Hours: 3+0

The major focus in biopharmaceutics will be concentrated on the various in vitro and in vivo factors that can affect drug performance in the body during the processes of liberation, absorption, distribution, metabolism, excretion with the purpose of evaluation of drug delivery systems, and the therapeutic management of patients. The pharmacokinetics section of the course provides a conceptual and quantitative background in pharmacokinetic theory and applications needed to pursue advanced studies in clinical pharmacokinetics.

Pharmaceutical Technology Course Code: PC705 Credit Hours: 2+1

The course is designed to provide students with proper knowledge in various aspects in the pharmaceutical technology including pre-formulation studies of solid dosage forms, manufacturing processes as granulation, drying and filtration. Packaging technology and its effect on medicine safety, effectiveness, and patients' compliance are also discussed. The course also focuses on the development of new drug delivery systems such as matrix solid dispersions, transdermal patches, and microspheres

Pharmaceutical Biotechnology Course Code: PC706 Credit Hours: 2+0

This course delivers up-to-date information about different biotechnological processes (Recombinant DNA, enzyme, hybridoma, and fermentation technology) involved in the development of therapeutic proteins, peptides, vaccines (DNA and RNA vaccines) and gene products. It also discusses various issues related to the development and delivery of these stable biotechnological products in humans

| CLINICA                                 | AL SCIENCES (CS)   |                   |
|-----------------------------------------|--------------------|-------------------|
| Social and Behavior Aspects in Pharmacy | Course Code: CP701 | Credit Hours: 2+0 |



The course introduces sociological, psychological, and behavioural aspects of pharmacy practice regarding patients' perspectives of health and illness, as well as their implications for pharmacists' roles. Variability in patients' individual needs and relationships with health care providers. It brings more knowledge of human behaviour to the students. It provides improved ways and means for students to learn about the nature of the multiple factors: social, culture & psychological, which affect the maintenance of health and the prevention of disease and disability. This will help in promoting health, preventing illness, restoring health and alleviating suffering.

#### Pharmacology & Therapeutics-I

**Course Code: CP702** 

Credit Hours: 3+1

The course provides knowledge of basic principles of pharmacokinetics and pharmacodynamics of medications and their therapeutic application. An in-depth discussion of concepts of importance in pharmacology is emphasized. The principles of the drugs affecting autonomic nervous system are discussed. Autacoids and anti-inflammatory medications (NSAIDs & Corticosteroids) are also covered. In addition, the course provides the clinical characteristics of peptic ulcer and inflammatory bowel disease. Finally, the pharmacologic benefits of medications in each disease, the management guidelines, treatment algorithms, and patient educations of the studied disorders are fully covered.

**Clinical Biochemistry Course Code: CP703** Credit Hours: 2+1

The course provides to the pharmacy students the knowledge and advances understanding of the metabolic pathways of different biomolecules and related clinical correlations in addition to the integration of metabolic reactions in different human tissues and different physiological and pathological conditions.

#### Pharmacology and Therapeutics-II

**Course Code: CP704** 

Credit Hours: 3+1

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

**Course Code: CP705 Pharmacy Practice** Credit Hours: 3+1

This course introduces students to various aspects of pharmacy practice. It covers the knowledge of minor diseases that can be managed by the pharmacist concerning aetiology, symptoms, diagnosis, treatment, management and counselling. Moreover, the student will learn the different types of over-the-counter (OTC) medications used for a variety of medical cases, such as respiratory and GIT systems, skin and dental care, ears, eyes, nose and throat (ENT) problems, as well as pain management. Further areas of learning are women's health, children's care, and smoking cessation. This course will also provide the student with professional communication skills needed to deal with patients in the hospital and community pharmacy settings during an OTC therapeutic dialogue.

#### Pharmacology and Therapeutics-III

**Course Code: CP706** 

Credit Hours: 3+1

This course is designed to provide students with broad understanding of central nervous system pharmacology in addition to the pharmacology, pathophysiology, clinical pharmacokinetic and pharmacotherapy in major area of endocrinology with special emphasis on the thyroid disorders. The course includes practical classes using case-based approaches related to the topics of this course. The course will be taught concurrently with Applied Pharmacokinetics to offer the maximum benefit of integrated knowledge.

#### **Applied Pharmacokinetics**

**Course Code: CP707** 

Credit Hours: 2+0

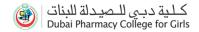
The course deals with the concepts of the clinical pharmacokinetics of certain drugs and calculation of doses of drugs during organ impairment and clinical transplant pharmacokinetics and therapeutic drug monitoring, drug administration, alteration of dosage form and doses based on individualization and population data, approach to therapeutic drug monitoring, a case study of drugs requiring therapeutic monitoring.

#### **Alternative and Complementary Medicines**

**Course Code: CP708** 

Credit Hours: 2+0

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 understand and describe clinical pharmacy and pharmaceutical care practice aspects. The aim of this course is to provide the students with the skills of treatment assessment, care plan developing and follow up evaluation. Also, the student will be provide with the skills of identifying different types of patients drug related needs, different types of drug related problems and taking decision with ethical considerations in the practice of clinical pharmacy.

#### Pharmacology and Therapeutics-IV

**Course Code: CP711** Credit Hours: 3+1 This course is designed to provide students with integrated knowledge of basic pharmacology of various classes of antibacterial, antiviral, antifungal and chemotherapeutic agents. Focus is emphasized on main indication of each antimicrobial, its significant adverse effect and precautions to avoid drug resistance. Furthermore, the course covers the management of selected infectious diseases based on evidence-based

#### **Pharmacogenomics & Precision Medicine Course Code: CP712** Credit Hours: 3+0

guidelines including lower respiratory tract, urinary tract, CNS, opportunistic infections as well as HIV.

The goal of the course is to give students an understanding of the principles of human genetics and genomics as they apply it to find solutions in drug therapy optimization and patient care, thus providing basic understanding of discipline of pharmacogenomics. This course discusses genetic basis of variability in drug response that contribute to drug efficacy and toxicity, adverse drug reactions and drug-gene interaction. As such, pharmacists need a thorough understanding of the genetic component of patient variability to deliver effective individualized pharmaceutical care.

#### **Course Code: CP713** Credit Hours: 2+0 **Hospital Pharmacy**

The aim of this course is to provide the students with knowledge of the principles of pharmacy practice in a hospital setting. It aims to enable students to gain knowledge to practice in various areas of hospital pharmacy including understanding the basic layout of the pharmacy department in a hospital setting; understanding the roles of the pharmacist in hospital practice including the distribution of medications, medication compounding, collaborations as a member of the healthcare team, and other patient care services, identifying and reporting any possible drug interactions and mastering the administrative part of hospital pharmacy services including drug distribution control system & unit Dose Systems.

## **Pharmacy Laws and Drug Regulations**

Credit Hours: 1+0 **Course Code: CP714** 

The course covers various policies, laws & regulations related to pharmacy practice and pharmacy professionals dealing with licensing, pharmacy operations, controlled substances, and operations in institutions. A Brief overview of the legal system including nature and sources of UAE laws on practicing pharmaceutical profession and trading in a medicine profession.

#### Pharmacoepidemiology & Pharmacovigilance

**Course Code: CP715** 

Credit Hours: 2+0

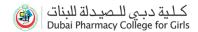
This is an introductory course, which equips students with a basic understanding of the concepts and practice of pharmacoepidemiology and pharmacovigilance in areas related to the assessment of drug safety and risk-benefit of drug use. This course will meet the needs of a wide variety of practitioners in detecting, managing, reporting of Adverse Drug Events/Reactions.

#### **Clinical Toxicology Course Code: CP716** Credit Hours: 2+0

The course is intended to empower students with basic knowledge of Clinical Toxicology. The major focus of the course is on basic principles, mechanisms, and common approaches for the management of poisoned patients. Selected topics are covered in this course that includes occupational, heavy metals and drug toxicities. Students will gain knowledge of how selected chemicals/drugs exert toxic effects, present and managed clinically.

Pharmacology and Therapeutics-V Course Code: CP717 Credit Hours: 2+1

This course is designed to provide students with comprehensive understanding of respiratory system disorders (i.e. asthma and chronic obstructive pulmonary disease; COPD), diabetes mellitus, rheumatologic diseases (i.e. osteoarthritis, rheumatoid arthritis, gout & 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 obtained from natural sources like plants, animals, fungi, or marine products for the treatment of some Diseases. Natural medicines are considered as important alternative to modern medicine. The aim of this course is to provide the students information about the international guidelines for assessing the quality, safety and the efficacy of natural medicines that present in the pharmaceutical markets, according to WHO. In addition, it provides the students information on the potential health benefits of natural medicines, their pharmacological action, folkloric uses, clinical studies, contraindications, side effects, interaction with other drugs, name of the supplement/s methods of preparation and the safe doses.

Pharmaceutical Administration and Pharmacoeconomics | Course Code: CP719 | Credit Hours: 2+0

The aim of this course is to provide the students with the working knowledge and fundamental principles of management related to pharmacy practice leadership. During this course, students are exposed to various administrative skills, strategic planning, motivational theories and risk management, which enable them to efficiently manage health care sectors. This course also covers the introduction of macoeconomics pharmacoeconomics, need and practice of pharmacoeconomic analyses in drug management, basic types of pharmacoeconomic analyses, drug utilization studies

#### **Pharmacy Automation & Informatics**

**Course Code: CP720** 

Credit Hours: 2+0

This course will be conducted in collaboration with automation industry to introduce the concept of automation in pharmacy like robotic pharmacy, use of mobile health tools, clinical software applications ("clinical apps"), and other associated devices used by clinicians and patients for patient care. This course acquaints with cyber-security systems and procedures for vulnerabilities. This course also supports key decision-making roles for pharmacists in the planning, selection, design, implementation, and maintenance of medication-use information systems, electronic health records.

#### Professional Skills in Practice Course Code: CP721 Credit Hours: 1+2

The aim of this course is to provide the students with the knowledge of the various health care providers, rapidly evolving types of healthcare delivery systems, and complexities of relationships among the various health care professionals working within the health care system. Students should be aware of the basic clinical skills required by pharmacists to get the insight they need to cultivate informed, compassionate and effective patient care.

Capstone course Course Code: CP722 Credit Hours: 0+2

This course helps in exploring the creativity of the students with a variety of realistic requirements and constraints in developing clinical pharmacy activities. The course is clinically oriented to emphasize the safety and efficacy in patient care. This course works with various elements of pharmaceutical care identified in the courses learned in all semesters to arrange and combine them to form a new concept (i.e., thinking outside the box), developing a creative, unique solution to the problem. This course integrates the problem based and project-based learning such as the challenges, effective learning through enquiry. This course collaboratively applies real world and theoretical knowledge to solve a problem.

Calculation in Practice Course Code: CP723 Credit Hours: 0+2

The aim of this course is to provide clear instructions of calculations to pharmacy students with thorough revision, and enabling them to perform flawless calculations accurately which develops confidence in them. Since pharmacist use calculations regularly in their practice, it is vital that they are able to employ calculation skills precisely so as not to compromise patient safety. Therefore the students should get a mandatory pass in this course before getting graduation.

#### **Professional Practice Experience (PPE) - Credit Hours: 24**

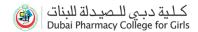
**IPPE01:** Introductory Professional Practice Experience for 200 hours during the summer semester in the second year of BPharm.

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

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

| Capstone Proje   | ct                                                    |  |  |  |  |  |  |  |  |
|------------------|-------------------------------------------------------|--|--|--|--|--|--|--|--|
| Capstone Project | Capstone Project Course Code: CS701 Credit Hours: 0+2 |  |  |  |  |  |  |  |  |



Credit Hours: 2+0

In the final phase of their studies, students have to present a project based on all-round knowledge they have acquired in different areas of pharmaceutical sciences. The presented project is evaluated, and the students are assessed for their knowledge by a panel of internal and external examiners.

#### **ELECTIVE COURSES**

#### AREA I

Organizational Behavior and Cultural Diversity Course Code: EC7011 Credit Hours: 2+0

This course exposes students to behavioral 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. Organizational 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

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.

#### Pharmacognosy and Phytochemistry Course Code: EC7022 Credit Hours: 2+0

Pharmacognosy & Phytochemistry course introduces the pharmacy students to the concept of the drugs derived from natural resources according to their biosynthetic origin as well to impart an understanding of natural product structures and the way they are put together in living organisms. The student should be aware with different methods of extraction, isolation/identification as well as with the biological activities of the plant constituents of the acetate-malonate and shikimic acid pathways and the drugs containing these constituents.

#### AREA III

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

This course introduces students to various aspects of Regulatory affairs. It covers the knowledge of the regulations and guidelines related to health care products (pharmaceuticals, medical devices and cosmetics) and the related component authorities/agencies in Europe, USA and GCC countries.

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

#### Pharmaceutical GMP 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.



#### Area IV

Nutrition and Health Course Code: EC7041 Credit Hours: 2+0

Nutrition and Health course provides the pharmacy students basics of nutrition by discussing the nutrients, their function in the human body and their sources in the diet. This course gives the students an understanding of the causes behind health issue related to nutrition. The course makes the students aware about what to eat and how to choose healthy foods. The course also makes the students to solve nutrition-related problems and make healthy food and nutrition decisions.

Bioassay and Screening in Drug Development Course Code: EC7042 Credit Hours: 2+0

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.

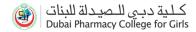
**Practical and laboratory work**: The practical exam evaluates the skills gained by the student which they have learned in all over the practical sessions offered in the course. It identifies the student's level of performance while demonstrating well-developed skills.

**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:

| Range of Marks | Grade Poi  | n f   | For BP         | harm                |
|----------------|------------|-------|----------------|---------------------|
| Range of Warks | Grade Poli |       | Evaluation     | <b>Grade Symbol</b> |
| 95- 100        | 4          |       | Outstanding    | A+                  |
| 90 – 94.99     | 3.75       |       | Excellent      | A                   |
| 85 – 89.99     | 3.50       |       | Very Good      | B+                  |
| 80 – 84.99     | 3.00       |       | Good           | В                   |
| 75 – 79.99     | 2.50       |       | Satisfactory   | C+                  |
| 70 – 74.99     | 2.00       |       | Pass           | С                   |
| 65 – 69.99     | 1.5        |       | Unsatisfactory | D+                  |
| 60 – 64.99     | 1.0        |       | Unsatisfactory | D                   |
| Below 60       | Failed     |       | Failed         | F                   |
|                | Administ   | rativ | e Codes        |                     |
| Incomple       | ete        |       | I              |                     |
| Withdra        | ıw         |       | W              |                     |

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

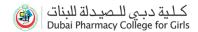
- The GPA is calculated by multiplying the grade of each course by the number of its credit hours and dividing the total by the number of total credit hours taken in a semester.
- The CGPA is calculated by multiplying the grade of each course by the number of it's credit hours and dividing the total 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.

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

| CDA / CCDA     | 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 10<sup>th</sup> week of a semester, students may choose to withdraw from a course without academic penalty; however, a grade of "W" will appear on the student's transcript.

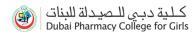
#### **DISCIPLINARY MEASURES**

Violation of the examination rules attempts of misleading conduct, disturbing behavior 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.

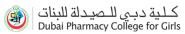
#### **ENSURING ACADEMIC INTEGRITY AT DPCG**

- ✓ Current college policies prohibit dishonesty, such as cheating, plagiarism, or knowingly furnishing false information to the college. DPCG's recommended discipline process about plagiarism and cheating is available from the Office of the Chief Academic Officer (BPharm) / Program Director (M. Pharm). 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 the Student Disciplinary Committee.



# 9.1.Scheme of Assessment

|                  |                   |        |                                                 | Π       |           |             |         |      |                |                                      |                       |            |                         |        |           | Assess         | ment T        | ools     |       |                |              |      |                     |        |            |            |
|------------------|-------------------|--------|-------------------------------------------------|---------|-----------|-------------|---------|------|----------------|--------------------------------------|-----------------------|------------|-------------------------|--------|-----------|----------------|---------------|----------|-------|----------------|--------------|------|---------------------|--------|------------|------------|
|                  |                   |        |                                                 |         |           |             |         |      |                |                                      |                       |            |                         |        |           |                |               |          |       |                |              |      | Prac                | tical  |            |            |
| Semester         | Code              | Domain | Courses                                         | Lecture | 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<br>Chemistry- I          | 2       | 0         | 2           | 10      | 10   |                | 15                                   |                       |            |                         |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
|                  | MC701             | BBS    | Anatomy and Physiology- I                       | 2       | 0         | 2           | 10      | 10   |                |                                      |                       | 15         |                         |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
| ţ.               | GE701             | GE     | Mathematics & Statistics                        | 2       | 0         | 2           | 10      |      |                | 10                                   |                       |            |                         |        |           |                |               | 15       |       |                | 25           |      |                     |        |            | 40         |
| Fall Semester    | GE702             | GE     | Medical Terminology and<br>Information Literacy | 2       | 1         | 3           |         |      |                |                                      |                       | 15         | 10                      |        |           | 10             |               |          |       |                | 25           |      |                     |        |            | 40         |
| = i              | GE703             | GE     | Computer Application                            | 0       | 2         | 2           | 10      |      |                | 10                                   |                       | 15         |                         |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
| L L              | GE704             | GE     | Islamic Study                                   | 2       | 0         | 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<br>Chemistry- II         | 2       | 1         | 3           | 10      |      |                | 15                                   |                       |            |                         |        |           |                |               |          |       |                | 20           | 15   | 3                   | 4      | 3          | 30         |
| ster             | CP701             | CS     | Social Behavior Aspects in Pharmacy             | 2       | 0         | 2           | 10      | 10   |                |                                      |                       |            |                         |        |           |                | 15            |          |       |                | 25           |      |                     |        |            | 40         |
| e E              | GE706             | GE     | Positive psychology                             | 2       | 0         | 2           | 10      | 10   |                |                                      |                       |            | 15                      |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
| Spring Semester  | GE707             | GE     | Green & Sustainable<br>Pharmacy                 | 2       | 0         | 2           | 10      |      |                |                                      |                       | 10         | 15                      |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
| , s <sub>2</sub> | PC702             | PS     | Pharmaceutics-1                                 | 3       | 1         | 4           | 10      |      |                |                                      |                       | 15         |                         |        |           |                |               |          |       |                | 20           | 15   | 3                   | 4      | 3          | 30         |
|                  | MC703             | BBS    | Anatomy and Physiology-II                       | 2       | 1         | 3           | 10      |      |                |                                      |                       | 15         |                         |        |           |                |               |          |       |                | 20           | 15   | 3                   | 4      | 3          | 30         |
|                  | 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           | EC7011/E<br>C7012 | EC     | Elective Area- I                                | 2       | 0         | 2           | 10      |      |                | 10                                   |                       | 15         |                         |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
| Fall<br>Semester | CP702             | CS     | Pharmacology and<br>Therapeutics-I              | 3       | 1         | 4           | 10      |      |                |                                      | 10                    | 15         |                         |        |           |                |               |          |       |                | 20           | 10   | 1                   | 2      | 2          | 30         |
| Serr             | PN703             | PS     | Medicinal Chemistry-I                           | 3       | 0         | 3           | 10      |      |                | 15                                   |                       | 15         |                         |        |           |                |               |          |       |                | 30           |      |                     |        |            | 30         |



|                    |         |        |                                                                    |         |           |             |         |      |                |                                      |                       |            |                         |        |           | Assess         | ment T        | ools     |       |               |              |      |                     |        |            |            |
|--------------------|---------|--------|--------------------------------------------------------------------|---------|-----------|-------------|---------|------|----------------|--------------------------------------|-----------------------|------------|-------------------------|--------|-----------|----------------|---------------|----------|-------|---------------|--------------|------|---------------------|--------|------------|------------|
|                    |         |        |                                                                    |         |           |             |         |      |                |                                      |                       |            |                         |        |           |                |               |          |       |               |              |      | Prac                | tical  |            |            |
| Semester           | Code    | Domain | Courses                                                            | Lecture | 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 | Artide review | Mid Semester | Exam | Attitude & Behavior | Manual | Attendance | Final Exam |
|                    | MC703   | BBS    | Biochemistry                                                       | 2       | 0         | 2           | 10      |      |                | 10                                   |                       | 15         |                         |        |           |                |               |          |       |               | 25           |      |                     |        |            | 40         |
|                    | MC704   | BBS    | Microbiology and<br>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         |
| еше                | CP703   | CS     | Clinical Biochemistry                                              | 2       | 1         | 3           | 10      |      |                |                                      |                       |            |                         |        |           |                | 15            |          |       |               | 20           | 15   | 5                   | 5      | -          | 30         |
| Spring Semester    | CP704   | CS     | Pharmacology and<br>Therapeutics-II                                | 2       | 1         | 3           | 10      |      |                |                                      |                       |            |                         |        |           |                | 15            |          |       |               | 20           | 15   | 5                   | 5      | -          | 30         |
| ς                  | 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<br>Semester | IPPE-01 | CS     | Introductory Professional<br>Practice Experience ( See<br>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<br>Biotechnology                                    | 2       | 0         | 2           | 10      | 10   |                |                                      |                       | 15         |                         |        |           |                |               |          |       |               | 25           |      |                     |        |            | 40         |
| Fall Semester      | CP706   | CS     | Pharmacology and<br>Therapeutics-III                               | 3       | 1         | 4           | 10      |      |                |                                      | 10                    | 15         |                         |        |           |                |               |          |       |               | 20           | 10   | 1                   | 2      | 2          | 30         |
| Fall               | CP707   | CS     | Applied Pharmacokinetics                                           | 2       | 0         | 2           | 10      | 10   |                |                                      |                       | 15         |                         |        |           |                |               |          |       |               | 25           |      |                     |        |            | 40         |
| - <b>-</b>         | 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         |
| Sp                 | PN706   | PS     | Instrumental analysis                                              | 2       | 1         | 3           | 10      |      |                |                                      |                       | 15         |                         |        |           |                |               |          |       |               | 20           | 15   | 5                   | 5      | -          | 30         |



|                   |                   |        |                                                                   | _       | T         |             |         |      |                |                                      |                       |            |                         |        |           | Assess         | ment T        | ools     |       |                |              |      |                     |        |            |            |
|-------------------|-------------------|--------|-------------------------------------------------------------------|---------|-----------|-------------|---------|------|----------------|--------------------------------------|-----------------------|------------|-------------------------|--------|-----------|----------------|---------------|----------|-------|----------------|--------------|------|---------------------|--------|------------|------------|
|                   |                   |        |                                                                   |         |           |             |         |      |                |                                      |                       |            |                         |        |           | A33C33         |               | 00.3     |       |                |              |      | Prac                | ical   |            |            |
| Semester          | Code              | Domain | Courses                                                           | lactura | 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 |
|                   | CP710             | CS     | Pharmaceutical Care                                               | 2       | 0         | 2           | 10      | 10   |                |                                      |                       | 15         |                         |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
|                   | CP711             | CS     | Pharmacology and<br>Therapeutics-IV                               | 2       | 1         | 3           | 10      |      |                |                                      |                       |            |                         |        |           |                | 15            |          |       |                | 20           | 15   | 5                   | 5      | -          | 30         |
|                   | CP712             | CS     | Pharmacogenomics and<br>Precision Medicine                        | 3       | 0         | 3           | 10      | 10   |                |                                      |                       |            | 15                      |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
|                   | EC7021/E<br>C7022 | EC     | Elective Area-II                                                  | 2       | 0         | 2           | 10      | 10   |                |                                      |                       | 15         |                         |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
|                   | GE710             | GE     | Innovation and<br>Entrepreneurship                                | 2       | 0         | 2           | 10      | 10   |                |                                      |                       | 15         |                         |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
| _ h               | IPPE-02           | CS     | Introductory Professional<br>Practice Experience (See<br>catalog) | 0       | 3         | 3           |         |      |                |                                      |                       |            |                         |        |           |                |               |          |       |                |              |      |                     |        |            |            |
| Summer            | 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<br>Regulations                             | 1       | 0         | 1           |         |      |                |                                      |                       |            | 50                      |        |           |                |               |          |       |                |              |      |                     |        |            | 50         |
|                   | 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<br>Therapeutics- V                               | 2       | 1         | 3           | 10      |      |                |                                      |                       |            |                         |        |           |                | 15            |          |       |                | 20           | 15   | 5                   | 5      | -          | 30         |
| i ii              | CP718             | CS     | Natural Medicines Safety and Efficacy                             | 3       | 1         | 4           | 10      |      |                |                                      |                       |            |                         | 15     |           |                |               |          |       |                | 20           | 15   | 3                   | 4      | 3          | 30         |
|                   | EC7031/E<br>C7032 | EC     | Elective Area III                                                 | 2       | 0         | 2           | 10      | 10   |                |                                      |                       |            | 15                      |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
| Spring<br>Semeste | CP719             | CS     | Pharmaceutical<br>Administration and<br>Pharmacoeconomics         | 2       | 0         | 2           | 10      |      |                |                                      |                       |            | 15                      |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |

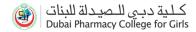


|                  |                   |        |                                                               |         |           |             |         |      |                |                                      |                       |            |                         |        |           | Assess         | ment T        | ools     |       |                |              |      |                     |        |            |            |
|------------------|-------------------|--------|---------------------------------------------------------------|---------|-----------|-------------|---------|------|----------------|--------------------------------------|-----------------------|------------|-------------------------|--------|-----------|----------------|---------------|----------|-------|----------------|--------------|------|---------------------|--------|------------|------------|
|                  |                   |        |                                                               |         |           |             |         |      |                |                                      |                       |            |                         |        |           |                |               |          |       |                |              |      | Pract               | ical   |            |            |
| Semester         | Code              | Domain | Courses                                                       | Lecture | 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 |
|                  | CP720             | CS     | Pharmacy Automation and Informatics                           | 2       | 0         | 2           | 10      |      |                |                                      |                       | 25         |                         |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
|                  | CP721             | CS     | Professional Skills in Practice                               | 1       | 2         | 3           |         |      |                | 10                                   |                       | 20         |                         |        |           |                |               |          | 30    |                |              |      |                     |        |            | 40         |
|                  | CP72              | CS     | Capstone Course                                               | 0       | 2         | 2           | 15      | 15   | 30             |                                      |                       |            | 30                      |        |           | 10             |               |          |       |                |              |      |                     |        |            |            |
|                  | CP723             | CS     | Calculations in Practice                                      | 2       | 0         | 2           | 10      |      |                |                                      |                       | 20         |                         |        |           |                |               |          |       |                | 30           |      |                     |        |            | 40         |
|                  | CS707             | CS/PS  | Capstone Project                                              | 0       | 2         | 2           |         | 25   |                |                                      |                       |            | 50                      |        |           | 25             |               |          |       |                |              |      |                     |        |            | -          |
|                  | EC7041/E<br>C7042 | EC     | Elective Area IV                                              | 2       | 0         | 2           | 10      |      |                |                                      |                       |            | 15                      |        |           |                |               |          |       |                | 25           |      |                     |        |            | 40         |
| Fall<br>Semester | APPE-02           | CS     | Advanced Professional<br>Practice Experience (See<br>catalog) | 0       | 1 6       | 1<br>6      |         |      |                |                                      |                       |            |                         |        |           |                |               |          |       |                |              |      |                     |        |            |            |



# 9.2.Seminar Rubrics Student Presenter: Grading Scale: F D+ C C+ B B+ A A+ Evaluator: Date: Date:

| Knowledge & content                                     | 1                                                                           | 2                                                                                                                                                                                                 | 3                                |         | L                       | ·        | 4     |                                                                 | -                                |        |         |      | Score |  |  |  |
|---------------------------------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------|-------------------------|----------|-------|-----------------------------------------------------------------|----------------------------------|--------|---------|------|-------|--|--|--|
| Knowledge & content                                     | (below 40)                                                                  | (40-60)                                                                                                                                                                                           | (60-80)                          |         |                         |          | 1 -   | 0-100                                                           | )                                |        |         |      | Score |  |  |  |
| Organization and<br>Presentation                        | Hard to follow, sequence.<br>of information jumpy                           | Most of information presented in sequence                                                                                                                                                         | Informa<br>logical<br>follow     | •       |                         |          | to in | teresti                                                         | ion pre<br>ng story<br>easy<br>e | y in   |         | the  |       |  |  |  |
| Background<br>Content                                   | Material not clearly related to topic C<br>background dominated.<br>seminar | Material sufficient for clear clear understanding but clear understanding AND not clearly presented effectively presented Material sufficient for clear understanding AND exceptionally presented |                                  |         |                         |          |       |                                                                 |                                  |        |         |      |       |  |  |  |
| Contribution of<br>Work                                 | Significance not mentioned or just hinted                                   | Significance mentioned                                                                                                                                                                            | Significa                        | nce ex  | cplained                | ł        |       | gnifica<br>plaine                                               | nce exc<br>d                     | eption | nally v | well |       |  |  |  |
| Knowledge of<br>Subject                                 | Does not have a grasp of information; answered only rudimentary questions   | At ease with information, At ease, answered all Demonstrated full knowledge;                                                                                                                      |                                  |         |                         |          |       |                                                                 |                                  |        |         |      |       |  |  |  |
| Presentation Skills                                     |                                                                             |                                                                                                                                                                                                   |                                  |         |                         |          |       |                                                                 |                                  |        |         |      |       |  |  |  |
| Graphics<br>(use of<br>PowerPoint)                      | Uses graphics that rarely.<br>support text and presentation                 | Uses graphics that relate to text and presentation                                                                                                                                                | Uses gra<br>explain              | -       |                         | entation | n ex  | Uses graphics that. explain and reinforce text and presentation |                                  |        |         |      |       |  |  |  |
| Mechanics                                               | The presentation has more than 10 misspellings and/or grammatical errors    | The presentation has no more than 5 misspellings and/or grammatical errors                                                                                                                        | Presenta<br>2 misspe<br>and/or g | ellings |                         |          | m     | isspelli                                                        | resenta<br>ngs or<br>tical err   |        | has     | no   |       |  |  |  |
| Eye Contact                                             | Reads most slides; no or just occasional eye Contact                        | Refers to slides to make points; occasional eye contact                                                                                                                                           | Refers to<br>eye cor<br>time     |         |                         |          |       |                                                                 | slides<br>with th                |        |         |      |       |  |  |  |
| Elocution - not<br>ability to speak<br>English language | Mumbles and/or<br>Incorrectly pronounces some terms                         | Incorrectly pronounces some terms                                                                                                                                                                 | Incorrec<br>terms                | tly pro | onounc                  | es a fe  |       |                                                                 | precise<br>iation c              |        | erms    |      |       |  |  |  |
| Intonation                                              | Voice is low; challenging to hear                                           | Voice fluctuates from low<br>to clear; difficult to hear at<br>times                                                                                                                              |                                  |         |                         |          |       |                                                                 |                                  |        |         |      |       |  |  |  |
| Length and Pace                                         | Short; less than 30 min                                                     | Short 40 min OR long >50                                                                                                                                                                          | Adequa                           | Aı      | Appropriate (45-50 min) |          |       |                                                                 |                                  |        |         |      |       |  |  |  |
|                                                         | Rushed or dragging throughout                                               | Rushed or dragging in parts                                                                                                                                                                       | Seminar                          | W       | ell-pa                  |          |       |                                                                 |                                  |        |         |      |       |  |  |  |



## 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.

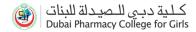
**E learning and Computer software's-** Use of electronic education technology and a set of instructions or program, that enables a computer to be used to provide educational information, to transmit communication or to aid in decision making.

**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.

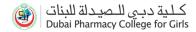
**Field trip:** A planned activity of one-day duration in an outdoor setting for demonstrations; observation of programs, practices, activities, or objects; presentations; or practical experiences.

**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 username 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.

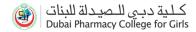
#### **Probation**

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 (BPharm) 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

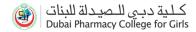
#### **Statement of Student Rights and Responsibilities**

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 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 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 the 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 behavior 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 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.

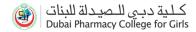
#### **Student's Responsibilities**

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 relationship with her colleagues
- 7. Inform the College administration or the Dean about misbehavior or any mistakes committed by any student, which may give a bad reputation to the College.
- 8. Pay the fees regularly as required by the College.
- **9.** All the students must follow the rules relating to attendance, and any non-compliance will lead to consequences mentioned in the attendance policy mentioned in the Student Handbook.
- 10. Regulation of Student Behavior: The guidelines and procedures for roles and responsibilities of students documented in DPCG Policies and Procedure Manual E. Students will be applicable for distance learning. As an additional guideline specifically for distance learning, DPCG will follow Student Behavior Management Distance Learning 2020 as provided by the Ministry of Education, UAE. This shall be communicated with students, faculty, and staff.

## 14. Student Appeals Policy

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



# 15. Students Grievance Policy

#### **Informal Resolution:**

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

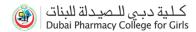
Dubai Pharmacy College for Girls (DPCG) provides all educational support facilities to its students. The students get the best scientific training and knowledge which will make them eligible as pharmacists to boost the vast scientific and industrial development of U.A.E.

#### **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 includes 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 practical's 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            | Bioactive Natural Products Research<br>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                              |
| LMS Laboratory                      | Physiology Laboratory                             |
| Biostatistics Laboratory            |                                                   |
| Central Research 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 class hours. These study rooms are 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 their study. The library working hours are arranged as far as possible to meet students' need. The library has subscribed to 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 online 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:**

| Monday - Thursday | 7.30am – 08:00 pm   |
|-------------------|---------------------|
| Friday            | 07:30 am – 12:00 pm |
| Sunday            | 10:30 am - 03:30 pm |

#### **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, has 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 prayer 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 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 checkups 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 may need counseling or support. DPCG provides students with counseling services through a trained student counselor who helps them to come up with a wide variety of student matters.

#### TRANSPORTATION FACILITIES

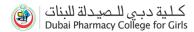
DPCG has special minibuses for transporting students from Sharjah, Ajman, Dubai and hostel. These buses are fully air-conditioned and quite comfortable. They are used for field trips and educational tours too.

#### **MOSQUES**

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

#### **DINING SERVICES**

The 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. 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 faculty members 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. 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. 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**

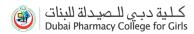
It refers to each course which is found necessary for each student to complete successfully before being allowed to register in a subsequent one, e.g., Pharmaceutical Organic Chemistry I is made a pre-requisite for Pharmaceutical Organic Chemistry-II.

#### Study load

Study load in DPCG means the number of credit hours a student is registered for and must attend weekly classes. In DPCG despite introducing a credit hours system, the load is according to the timetable fixed for each class. The only provision given to the student will be the minimum credit hours out of the total that they must successfully complete each semester 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 experience 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 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 unauthorized materials, or
- referring during the examination to any unauthorized material.

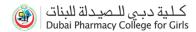
**Impersonation:** This offence is the assumption by any person of the identity of a student with intent to deceive or gain unfair advantage. Impersonation commonly entails using a substitute to undertake, in full or part, an examination or other assessment task.

**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 authorized 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 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, 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 Professional Practice Experience in different pharmacy practice settings.

#### **Responsibility for Application**

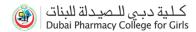
Head, Student's Professional Practice Experience Unit.

#### **Process**

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

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

- I. Introductory Professional Practice Experience (IPPE 01) in **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 be assigned 4 assignments 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**

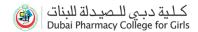
At the end of each of IPPE001, IPPE02, and APPE the students must answer a questionnaire. The college Supervisor will collect these questionnaires and co-ordinate the results. The results of this study will be discussed in the College Academic Council Meeting and the Advisory Committee for any improvements 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 "Logbook" to write down daily activities during the PPE.
- The College Supervisor will provide the student with the procedure for filling out 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 the 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.

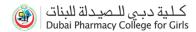
Shadowing, another type of introductory practice experience involves observing practitioners conducting pharmaceutical services in the community pharmacy.

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 medication 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.

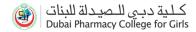
## **Role of Preceptor**

- ✓ 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:

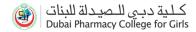
- College Supervisor: Pharmaceutics Department, DPCG.
- Industry Supervisor: Training Center, Drug Manufacturing Industry.

#### 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.
- ✓ Fulfilment 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<br>(marks) |
|-----------|-------------------------------------------------------------------------------------------------------------------------|-----------------------|
| a.        | Punctuality (attendance, discipline etc.)                                                                               | 10                    |
| a.        | (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                                                                    |                       |
| e.        | For submission = 10 For presenting = 10                                                                                 | 20                    |
| AVERAGE o | of TOTAL                                                                                                                | 100                   |

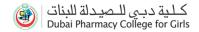
## III) Introductory Professional Practice Experience-Health care setting (IPPE-02)

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

- a. The 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 have not less than 2 years of experience as a registered practicing/administrative pharmacist in UAE.

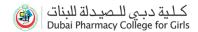
## **Responsibilities of filed Supervisors**

- ✓ 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 in 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 JaberDubai 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:

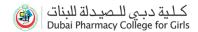
|                     | Clerkship                               | Duration<br>(Weeks) | Credit Hours |
|---------------------|-----------------------------------------|---------------------|--------------|
| Rotation 1 AP01-IM  | Internal Medicine                       | 4                   | 4            |
| 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 always abide by these policies and procedures.
- Any information about a hospital and/or a hospital pharmacy's operation must be considered



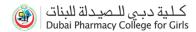
- confidential and is not to be discussed with other students or with anyone other than the instructors and the faculty members in charge of the educational program.
- Any information about a patient's illness or medication is confidential and is not to be discussed
  with anyone other than the instructor, 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 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 initiative, 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 professionals without instructions from the preceptor.
- Attendance at the hospital during the institutional attachment is mandatory. The student must notify in advance 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 suggestions for improvement to achieve optimal patient care.

#### **Duties And Responsibilities**

• This is primarily aimed to guide the respective preceptors and students in their role and responsibilities. This is crucial since the success of the attachment depends on the implementation, and this is vital in ensuring all 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 a student, in way of performance, appearance, attitude, and method of practice.
- The preceptor must always insist on communication with the student 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, always, 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, always, 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.

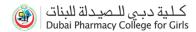
#### Placement:

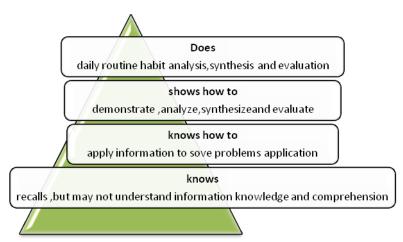
- 1. Duration of stay at each of the above units/services is arranged depending on the magnitude of the activities and the emphasis of the students' exposure. It may vary differently from each hospital according to the needs and facilities of the concerned hospital.
- 2. Students are to abide by the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

The 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 "knowing" 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                             | <b>Marks Allotted</b> |
|--------|-----------------------------------------|-----------------------|
| 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**

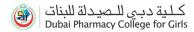
Relevant records such as logbook, etc.... will be checked by the head of Students' Professional Practice Experience Unit

## **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 all-round knowledge they have acquired in the four main areas viz. Clinical Pharmacy and Pharmacy Practice, Pharmaceutics, Pharmacology and Toxicology, and Pharmaceutical Chemistry and Natural Products. This project includes 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 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 students is allocated to specific research supervisor at the end of the sixth semester. The advisor shall supervise the students' graduation project work and paper preparation and will chair the examining committee for the students' defense of their project and write up.

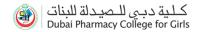
## 1) Completion of the Capstone Project

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

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

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

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



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

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

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

## Facilities for the writing of the project:

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

Various facilities provided by DPCG are:

- Drug Information Center
- Central Library
- IT facilities

#### Others:

Library of Dubai Health Authority Hospitals.

## c) Organization of Capstone Project

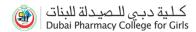
The Capstone Project should be assembled in the order listed below:

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

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

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

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



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

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

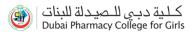
## 2) Submission of the Graduation Research Project for Evaluation

- **i.** Five copies of the graduation project article are submitted to the Head of Faculty Development and Research Unit, latest by 1<sup>st</sup> June.
- **ii.** The Dean forms an Evaluation Committee for the Project in consultation with the College Academic Council for the evaluation of the Project. The Evaluation Committee consists of the following:
  - **a.** A panel of external examiners
    - Two experts in the related field of research
  - **b.** A panel of internal examiners
    - Dean or Head of the concerned Department
    - Supervisors of the Capstone Project
- **iii.**The students must 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.

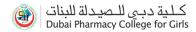
| Thesis evaluation Rubrics "Criteria"                                                 | Marks |
|--------------------------------------------------------------------------------------|-------|
| Research Idea: 5 Marks                                                               |       |
| - The topic 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. Content: (15 marks) - The project is divided into clear heading as follows: Abstract Graphical abstract Introduction and Literature Review Experimental or Methodology Discussion and Results Conclusion Citations & References - Detailed and comprehensive introduction, methodology and discussion are presented. - Shows creative thinking and thoughtful insight. - Shows critical analysis of research related to topic and compared to current study. - Conclusion is supported by information or data. All citations and references are updated and appropriate to the study. - All citations and references are presented in proper format and do not need revision. Total Marks: /25

|                  |                                                                                   | Oral Presentation Evaluation |                                                                                                                                                                                       |   |                                                          |   |             |
|------------------|-----------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------------------|---|-------------|
| Studen<br>t name | Oral Presentation                                                                 | 9                            | PPT content                                                                                                                                                                           | 8 | Oral Discussion                                          | 8 | Mark<br>/25 |
| 1-               | -Enthusiasm<br>- Posture<br>- Eye contact<br>- Speaks clearly and no              |                              | - The presentation is easy to follow - Originality in presenting the work                                                                                                             |   | - Answered the examiner's questions - Answered the       |   |             |
| 3-               | mispronunciation - Volume is loud enough to be heard -Preparedness for presenting |                              | -Appropriate transition - All parts of the thesis are presented in a clear, representative way.                                                                                       |   | critical thinking questions 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<br>during their<br>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. |   |                                                          |   |             |

|              | Teamwork                                        | Work Progress                     |       |
|--------------|-------------------------------------------------|-----------------------------------|-------|
|              | (12 marks)                                      | (13 marks)                        |       |
|              | - Cooperation between the student and his group | - Did the assigned work properly. |       |
|              | - Respect of time                               | - Submitted the assigned work on  | 24.1  |
|              | - Harmony                                       | time.                             | Marks |
| Student name | - Behavior with the supervisor and colleagues   | - Showed creativity and novelty.  | /25   |
|              | - Contribution to the work                      |                                   |       |



| Conference |  | /25 |
|------------|--|-----|
| 2-         |  |     |
| 1-         |  |     |

| Marking So                                               | <u>:heme</u>     |            |
|----------------------------------------------------------|------------------|------------|
| <u>ltem</u>                                              | Score out of 100 | Percentage |
| Thesis writing evaluation (25 marks)                     |                  | 25%        |
| A. Research Idea                                         | 5                |            |
| B. Organization and Formatting                           | 5                |            |
| C. Content                                               | 15               |            |
| ✓ Abstract                                               |                  |            |
| ✓ Graphical abstract                                     |                  |            |
| ✓ <u>Introduction</u> and Literature Review              |                  |            |
| <ul> <li>✓ <u>Experimental or Methodology</u></li> </ul> |                  |            |
| ✓ <u>Discussion and Results</u>                          |                  |            |
| ✓ <u>Conclusion</u>                                      |                  |            |
| ✓ <u>Citations &amp; 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**



































بلدية مدينة أبو ظبي MUNICIPALITY OF ABU DHAB! CITY

























Zulekha Hospital

















|                                                                                                                                         | DPCG FACULTY MEMBE                                                                    | KS                                                                                                             |                              |  |
|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------|--|
| Name                                                                                                                                    | Degrees                                                                               |                                                                                                                | Year                         |  |
| Prof.Dr. Saeed Ahmed Khan                                                                                                               | Ph. D. (Chemistry)                                                                    | Delhi University (India)                                                                                       | 1985                         |  |
| Dean,                                                                                                                                   | M. Phil. (Chemistry)                                                                  | Delhi University (India)                                                                                       | 1982                         |  |
| Professor, Pharmaceutical<br>Chemistry Department                                                                                       | M. Sc (Chemistry)                                                                     | Aligarh Muslim University<br>(India)                                                                           | 1980                         |  |
| Prof. Dr. Naglaa Gamil Shehab Chief Academic Officer Professor, Clinical Pharmacy &                                                     | Ph.D.(Pharmacognosy & Phytochemistry).  M.Pharm. (Pharmacognosy)                      | Cairo University (Egypt)  Cairo University (Egypt)  Cairo University (Egypt)                                   | 2004<br>1998<br>1991         |  |
| Pharmacotherapeutics Department  Prof.Fazilatun Nessa  Head, Pharmaceutical Chemistry Department  Professor in Pharmaceutical Chemistry | B.Pharm  Ph.D. (Pharmaceutical Chemistry)  M.Pharm(Pharmaceutical Chemistry)  B.Pharm | University Sains Malaysia(Malaysia) University of Dhaka (Bangladesh)  University of Dhaka (Bangladesh)         | 2004<br>1991<br>1989         |  |
| Mrs. Khuloud Abu Shawish Teaching & Research Assistant.                                                                                 | MSc. (ongoing)  B.Pharm                                                               | Sharjah University  Dubai Pharmacy College                                                                     | 2020                         |  |
| Mrs. Suzan<br>Professional Staff                                                                                                        | Master of Science                                                                     | Mahatma Gandhi University                                                                                      | 2004                         |  |
| Prof. Dr. Aliasgar Fakruddin<br>Shahiwala<br>Graduate Program Director<br>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<br>2005<br>1999<br>1996 |  |
| Prof. Dr.Bazigha K. Abdul Rasool Head, Pharmaceutics Department                                                                         | Ph.D. (Pharmaceutics)  M.Sc. (Pharmaceutics)                                          | University of Baghdad, (Iraq) University of Baghdad (Iraq)                                                     | 2004<br>1998                 |  |



| DPCG FACULTY MEMBERS                                                             |                                           |                                                                      |      |  |
|----------------------------------------------------------------------------------|-------------------------------------------|----------------------------------------------------------------------|------|--|
| Name                                                                             | Degrees                                   | Institution                                                          | Year |  |
| Dr. Rana Sammour Assistant Professor in                                          | PhD Pharmaceutical Technology             | International Islamic<br>University of Malaysia (IIUM)<br>(Malaysia) | 2020 |  |
| Pharmaceutics Head Student Affairs                                               | Msc. Pharmaceutical Technology            | Ajman University of Science and Technology (UAE)                     | 2013 |  |
|                                                                                  | B.Pharm                                   | Dubai Pharmacy College<br>(UAE)                                      | 2003 |  |
| Mrs. AlZahraa Mahmoud Hussain                                                    | PhD ( ongoing)                            | University of Strathclyde (UK)                                       | 2019 |  |
| Assistant Lecturer                                                               | MPharm Pharmaceutical Product Development | Dubai Pharmacy College UAE)                                          | 2016 |  |
| Head Graduate Affairs and Career<br>Guidance                                     | B.Pharm                                   | Dubai Pharmacy College<br>(UAE)                                      | 2008 |  |
| Prof.Mirza Baig                                                                  | PhD (Clinical Pharmacy)                   | University Sains Malaysia                                            | 2011 |  |
| Head, Clinical Pharmacy &                                                        | MPharm                                    | RGUHS, India                                                         | 2003 |  |
| Pharmacotherapeutics Department  Professor in Clinical Pharmacy                  | B.Pharm                                   | Gulbarga University, India                                           | 2000 |  |
| Program Coordinator – MPharm<br>Clinical Pharmacy                                |                                           |                                                                      |      |  |
| Dr. Gazala Afreen Khan                                                           | Ph. D. (Genetics)                         | Osmania University (India)                                           | 2004 |  |
| Head, Examination and Evaluation                                                 | M. Sc (Genetics)                          | Osmania University (India)                                           | 1998 |  |
| Unit Assistant Professor                                                         | B.Sc                                      | Osmania University (India)                                           | 1996 |  |
| Clinical Pharmacy and Pharmacotherapeutics Department                            |                                           |                                                                      |      |  |
| Dr. Hanan Sayed Anbar                                                            | Ph.D. (Pharmacology & Toxicology)         | Mansura University (Egypt)                                           | 2017 |  |
| Head of Faculty Development and<br>Research Unit                                 | M. Sc. (Pharmacology & Toxicology)        | Mansura University (Egypt)                                           | 2010 |  |
| Assistant Professor in Clinical<br>Pharmacy & Pharmacotherapeutics<br>Department |                                           |                                                                      |      |  |
| Dr. Ammar Ali Saleh Jaber                                                        | Postdoctorate                             | University Sains Malaysia                                            | 2018 |  |



| Name                                                                                                    | Degrees                                                     | Institution                                                                                                              | Year                 |
|---------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|----------------------|
| Head, Professional Practice<br>Experience Unit<br>Assistant Professor in Clinical<br>Pharmacy           | PhD (Clinical Pharmacy)  MPharm (Pharmacy)                  | University Sains Malaysia  Jamia Hamdard, India                                                                          | 2017                 |
| 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<br>2010<br>2002 |
| Prof. Kishore Gnana Sam  Professor in Pharmacy Practice  Clinical Pharmacy Consultant in  DMU Hospital  | PhD (Pharmacy Practice)                                     | Manipal University of Higher<br>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<br>2008<br>2006 |
| Ms. Yosra 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<br>2015<br>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<br>2015<br>2005 |
| Ms. Maram Omar Abbas                                                                                    | MPharm (Clinical Pharmacy)                                  | Dubai Pharmacy College UAE)                                                                                              | 2021                 |



| Name                                                                                                                                                  | Degrees                                                                      | Institution                                                                                                    | Year                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|--------------------------|
| Teaching Assistant in Clinical<br>Pharmacy                                                                                                            |                                                                              |                                                                                                                |                          |
| 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) | <br>2007<br>2002<br>1995 |
| Ms. Sadaf Sana<br>Instructor in Psychology<br>Student Counselor                                                                                       | BS (Hons.) Applied Psychology  MS Industrial and Organizational Psychology   | Kinnaird College for Women,<br>Pakistan<br>Government College<br>University, Pakistan                          | 2013                     |
| <b>Dr. Rizah Anwar Assadi</b> Clinical Preceptor, Clinical Pharmacy and Pharmacotherapeutics Department                                               | PharmD (Doctor of Pharmacy)                                                  | Gulf Medical University (Ajman, United Arab Emirates)                                                          | 2016                     |
| Ms. Yasmeen Yaser Salem  Teaching Assistant Department of  Pharmaceutics.                                                                             | BPharm  MSc. (ongoing)                                                       | Dubai Pharmacy College                                                                                         | 2019                     |
| Ms. Deepthy Vipin Raj<br>Assistant Lecturer and IE<br>Coordinator                                                                                     | M. Phil in Statistics  MSc. Statistics  BSc. Statistics                      | University of Kerala, India University of Kerala, India Government College, India                              | 2009<br>2008<br>2006     |



| F                                                                           | ACULTY from DMCG                                                                           |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Dr. Shifaan Khanday<br>Assistant Professor in Anatomy                       | Dr. Marium<br>Assistant Professor in Pathology                                             |
| <i>Dr. Aprajita</i> Assistant Professor in Physiology                       | Prof. Naglaa Raafat Abdl Raob, Professor in Biochemistry.                                  |
| <i>Dr. Rasha</i> Associate Professor in Physiology                          |                                                                                            |
| <i>Prof. Ghazala Mehdi</i><br>Professor in Pathology                        | Prof. Tasneem Sandozi Professor in Pharmacology                                            |
| ı                                                                           | PART-TIME FACULTY                                                                          |
| Dr. Jinan<br>PhD (UK)<br>Assistant Professor in Islamic Studies             | Ms Nagina Jannat<br>PharmD – MBA Marketing<br>Instructor – Innovation and Entrepreneurship |
| Dr.Mariem Galadari<br>Lecturer in Pharmacy Laws<br>Cairo University         | Dr. Jamal Farook –<br>PhD in General education                                             |
| Dr. Mohamed Abdullah<br>Bachelor of Pharmaceutical Sciences, BPharm faculty |                                                                                            |

| SUPERVISORS FOR PROFESSIONAL PR | RACTICE 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

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Aster Pharmacy