UBC Vancouver

ACADEMIC CALENDAR

2020/21

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Academic Staff
Introduction

Dean's Office
M. Coughtrie, Dean
T. Chang, Associate Dean, Research, Graduate and Postdoctoral Studies
S. Jarvis-Selinger, Associate Dean, Academic
P. Zed, Associate Dean, Practice Innovation

2405 Wesbrook Mall
Vancouver, BC V6T 1Z3
Fax: 604.822.3035
Pharmaceutical Sciences Website (http://www.pharmsci.ubc.ca)

The Faculty of Pharmaceutical Sciences offers courses leading to the Bachelor of Pharmaceutical Sciences, Doctor of Pharmacy, Master of Science, and Doctor of Philosophy.

The Bachelor of Pharmaceutical Sciences prepares graduates for employment in the biotechnology and pharmaceutical industries; government affairs, relations and policy; regulatory affairs; industrial manufacturing; the personal care product and nutraceutical industries; health care and allied health care professions; and, transition to academic research. The Entry-to-Practice Doctor of Pharmacy prepares graduates for contemporary and future pharmacy practice in healthcare settings such as community, primary care, ambulatory care, and hospital practice; and for industry, government, and other specialized fields. The Flexible Doctor of Pharmacy provides an opportunity for pharmacists with a bachelor’s degree in Pharmacy to obtain a degree equivalent to the Entry-to-Practice Doctor of Pharmacy.

For information on graduate programs, see Pharmaceutical Sciences.

The Faculty of Pharmaceutical Sciences was established in 1945 and is housed in the Pharmaceutical Sciences Building, 2405 Wesbrook Mall.

Bachelor of Pharmaceutical Sciences

Bachelor of Pharmaceutical Sciences > Introduction

The program leading to the Bachelor of Pharmaceutical Sciences credential is designed to prepare graduates for careers in the pharmaceutical research industry and for further studies in pharmaceutical sciences graduate programs.

By the end of their four-year undergraduate degree, students will:

• Apply the knowledge and practical skills gained in this program to contribute to the discovery, development and evaluation of drugs and therapies.
• Be able to contribute to the broad discourse between academic, industry and government professionals through specific training provided by our Faculty that enables these students to understand and be proficient in the types of language required in these sectors.
• Meaningfully contribute to social, political and economic discussions as professionals, entrepreneurs and emerging leaders in the area of pharmaceutical science.
The Faculty of Pharmaceutical Sciences also offers an undergraduate Doctor of Pharmacy (Pharm.D.) degree program that prepares graduates for the practice of pharmacy in a variety of healthcare settings. For more information about the Entry-to-Practice Doctor of Pharmacy program, see Entry-to-Practice PharmD (http://calendar.ubc.ca/vancouver/index.cfm?tree=12,213,956,0).

For graduate programs in the Faculty of Pharmaceutical Sciences, see Graduate Programs (http://calendar.ubc.ca/vancouver/index.cfm?tree=12,213,840,1276).

Bachelor of Pharmaceutical Sciences > Academic Advising

Advising is not required for most students but is available on request. Depending on the student's academic circumstances (e.g., academic probation, request for academic concession, or other matters), the Faculty reserves the right to make advising mandatory prior to registration.

Academic advising is required for Honours students.

The Office of Student Services is open Monday to Friday, in room 1300 of the Pharmaceutical Sciences Building. Student Resource staff are available to assist undergraduate students in their general academic planning, in interpreting Faculty regulations and course requirements, and in resolving academic and personal problems.

Additional student support resources can be found here (http://calendar.ubc.ca/vancouver/index.cfm?tree=6,310,0,0).

Bachelor of Pharmaceutical Sciences > Admission

General Information

The Faculty has a broad-based admission policy that takes into consideration academic performance and evidence of other characteristics and qualities, to select the most competitive students for the Bachelor of Pharmaceutical Sciences program. As part of this process, academically competitive applicants will be required to participate in an interview.

UBC's procedures, policies, and general admission requirements are specified in Admissions (http://calendar.ubc.ca/vancouver/index.cfm?tree=2,0,0,0). Further admission information is available from the Faculty (http://pharmsci.ubc.ca/).

Meeting the minimum prescribed admission requirements means only that the applicant is eligible for selection but in no way guarantees admission. As enrolment in the program is limited, the average required for admission is higher than the published University minimum.

Admission from Secondary School

Admission from Secondary School is to Year One of the program. Admissibility is determined on the basis of a number of factors including performance in specific high school courses (http://calendar.ubc.ca/vancouver/index.cfm?tree=2,325,0,0), evidence of relevant learning and achievements both in and out of school, and other indicators of suitability for the Bachelor of Pharmaceutical Sciences program at UBC. As a part of the admissions process, all applicants are required to submit a personal profile.

Admission as a Post-Secondary Transfer

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Admission as a post-secondary transfer applicant is to Year Two of the program. Post-secondary transfer applicants must meet competitive admission requirements for entry. Full details on admission as a post-secondary transfer student are described under "Applicants from a Post Secondary Institution" (http://calendar.ubc.ca/vancouver/index.cfm?tree=2,25,0,0). Applicants are not admitted into the third or fourth years of the Program.

Students must have completed the following UBC courses (or their equivalents):

- BIOL 112 and one of BIOL 153 or BIOL 155
- CHEM 121 and CHEM 123
- One of MATH 100, MATH 102, MATH 104, MATH 120, MATH 180, MATH 184
- One of MATH 101, MATH 103, MATH 105, MATH 121
- WRDS 150
- 3 credits of electives

Transfer credit will be assessed after admission has been achieved. Once admitted, students are required to take PHAR 180 in addition to Year Two requirements.

Transfer from another UBC Program

UBC students, including Vantage College students, who wish to transfer to the Bachelor of Pharmaceutical Sciences program must follow the procedures, policies, and admission requirements specified in Change of Degree Program (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,303,0,0), Change of Campus (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,273,0,0), or Readmission (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,274,0,0).

Students applying for admission from another UBC program are subject to the requirements noted above under Admission as a Post-Secondary Transfer.

Bachelor of Pharmaceutical Sciences > Registration

Students should also refer to the University’s detailed registration information (http://students.ubc.ca/enrolment/courses/registration) and other guidance at Current Students (http://pharmsci.ubc.ca/current-students/all-undergraduate-students).

Students are encouraged to register on their assigned date of registration. Enrolment in the required courses of the program is limited and admission to the program does not guarantee that space will be available in any specific course, or section, as per the University’s policy on space in courses (http://calendar.ubc.ca/vancouver/index.cfm?tree=3,37,0,0). Students are encouraged to consult the Office of Student Services for details of any restrictions on enrolment.

Students enrolled in courses offered by other UBC Faculties must abide by the Academic Regulations of the offering Faculty.

Students may not attend courses for which they have not registered or attend sections of courses other than those in which they are registered.

It is the responsibility of students to determine that they are registered and have selected courses for which they have the prerequisite. Students who are registered on wait-lists are expected to check on-line to determine whether they have been placed in the course by the program; such changes in registration may occur after classes start.
Credit excluded courses are courses that have sufficient overlap in content that credit will be given for only one course or combination of courses listed in the Faculty of Science’s Credit Exclusion Lists (http://calendar.ubc.ca/vancouver/index.cfm?tree=12,215,410,414). Credit excluded courses are not equivalent, so permission of a program advisor is required for substitution of a required course with a course from the Credit Exclusion Lists.

Students registered in any PHAR course that has a laboratory must attend their first scheduled laboratory class in that course. Failure to do so may result in termination of the student’s registration in the course. Students who are unable to attend their first scheduled laboratory class in a course must notify the Office of Student Services within 48 hours of the time affixed for that class or have their registration in the course terminated.

Within time limits students may drop or withdraw (http://calendar.ubc.ca/vancouver/index.cfm?tree=3,45,98,0) from courses using the Student Service Centre (http://ssc.adm.ubc.ca/sscportal/servlets/SRVSSCFramework). After these dates, students are not normally permitted to withdraw from courses but may apply for Academic Concession (see Campuswide Policies and Regulations > Academic Concession (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,329,0,0)).

Bachelor of Pharmaceutical Sciences > Academic Regulations

Academic Regulations

Students are reminded that they are subject to the University’s Campus-wide Policies and Regulations (http://calendar.ubc.ca/vancouver/index.cfm?tree=3,0,0,0), and are directed especially to Student Declaration and Responsibility (http://calendar.ubc.ca/vancouver/index.cfm?tree=3,285,0,0), Academic Honesty and Standards (http://calendar.ubc.ca/vancouver/index.cfm?tree=3,286,0,0), and Academic Freedom (http://calendar.ubc.ca/vancouver/index.cfm?tree=3,33,0,0).

All members of the Faculty of Pharmaceutical Sciences, including students, are expected to exhibit the highest standards of conduct. For more information, see UBC Faculty of Pharmaceutical Sciences code of conduct (http://pharmsci.ubc.ca/sites/pharmsci.ubc.ca/files/Web_UBCPS%20Code%20of%20Conduct_0.pdf).

Attendance and Academic Concession

Regular attendance is expected of students in all course components, including lectures, laboratories, tutorials, workshops, discussions, and seminars. Students who neglect academic work and assignments in a course, or who fail to attend a sufficient number of classes, put themselves in danger of failure and may not be permitted to write the final examination. Students who are unavoidably absent from scheduled classes because of illness or disability should contact the Office of Student Services. Students whose attendance or academic performance is severely affected by medical or other extenuating circumstances should apply for academic concession through the Office of Student Services or UBC Centre for Accessibility. See UBC Academic Concession (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,323,0,0).

Email Communication

Email is the official means of communication for the Faculty of Pharmaceutical Sciences, and is used by Faculty of Pharmaceutical Sciences members to relay important messages to students. It is the responsibility of all Pharmaceutical Sciences students to ensure that their current email address is accurately recorded on UBC's Student Service Centre (http://students.ubc.ca/ssc), and to read email sent to that account on a regular basis. Free email accounts (http://it.ubc.ca/services/email-voice-internet/student-alumni-email-account) are available to all UBC students, this program will require the use of the @alumni email address for official correspondence. University staff members are not responsible for responding to returned messages or for the consequences of messages not received due to full mailboxes, spam blockers, inactive addresses, etc. Students should inquire about and follow their instructors’ policies on email communication. All use of email is governed by UBC’s Policy SC14, Acceptable Use and Security of UBC Electronic Information and Systems (http://universitycounsel.ubc.ca/files/2013/10/SC14(docs).pdf).
Bachelor of Pharmaceutical Sciences > Academic Recognition, Promotion, and Continuation

Dean's List

Dean's List designation recognizes exceptional academic achievement in the Faculty of Pharmaceutical Sciences.

Students who complete at least 27 percentage graded credits in a Winter Session, and who achieve an average of 85% or higher on at least 27 of these credits, will receive the notation "Dean's List" on their permanent record.

Scholarships and Awards

For information on scholarships and awards available to academically outstanding students, see Awards, scholarships and bursaries (http://students.ubc.ca/enrolment/finances/awards). See also Fees (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,0,0,0).

Class Standing at Graduation

Graduation Class Standing appears on the transcript, and is awarded based on grades earned for at least 48 upper-level credits. These must include all upper-level credits used to satisfy degree or specialization requirements, and can include the best upper-level electives, as necessary, to reach a total of 48 credits. Using this calculation, students who achieve an average of 80% or higher receive Class 1 standing. Those with an average between 65% and 79.9% receive Class 2 standing, and those with an average of 64.9% or lower receive Class P (Pass) standing.

Promotion Requirements

Students are reminded that they are subject to the University’s Advancement Regulations (http://calendar.ubc.ca/vancouver/index.cfm?tree=3,43,0,0).

In order to progress from one year-level standing to the next, a student must successfully complete the required courses as outlined in the Degree Requirements (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,213,1026,1673) table. These may include transfer credit as well as credit earned through exchange. Year-level standing impacts a student’s eligibility for specializations and courses, and is one of the factors considered when registration dates are set. Promotion is evaluated annually upon completion of the Winter Session.

Continuation Requirements

Continuation, or a student’s eligibility to continue registering in their degree program, is evaluated annually upon completion of the Winter Session. Continued registration eligibility is granted based on the Sessional Average for the Winter Session, as well as a review of previous Sessional Standings and specific continuation requirements.

Students who fail in two attempts at any single required course of the B.P.Sc. program will be required to discontinue from the Faculty of Pharmaceutical Sciences, regardless of their Sessional Standing and Continuation Status. These attempts may be from the same or different Sessions.

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Continuation is evaluated as follows:

<table>
<thead>
<tr>
<th>Winter Session Average</th>
<th>ACPR or Fail already on Record</th>
<th>Sessional Standing</th>
<th>Continuation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>55% or more</td>
<td>N/A</td>
<td>Pass(^1)</td>
<td>Eligible to continue</td>
</tr>
<tr>
<td>50% to 54.9%</td>
<td>No</td>
<td>ACPR(^2)</td>
<td>Eligible to continue</td>
</tr>
<tr>
<td>50% to 54.9%</td>
<td>Yes</td>
<td>Fail(^2,4)</td>
<td>Required to withdraw</td>
</tr>
<tr>
<td>less than 50%</td>
<td>N/A</td>
<td>Fail(^3,4)</td>
<td>Required to withdraw</td>
</tr>
</tbody>
</table>

\(^1\) Students who attain a sessional average of 55% or more will be assigned ‘Pass’ standing and will be eligible to continue their studies. Those who do exceptionally well may also receive recognition; see Dean’s List above.

\(^2\) Students who attain a sessional average between 50% and 54.9% will be placed on Academic Probation (ACPR). This will be noted on their academic record. They will be eligible to continue their studies unless they have previously received ‘Fail’ or ‘ACPR’ standing in the Faculty of Pharmaceutical Sciences, in which case they will be assigned a ‘Fail’ standing and required to withdraw from the Faculty.

\(^3\) Students who attain a sessional average of less than 50% in a Winter Session will be assigned a ‘Fail’ standing and required to withdraw from the Faculty.

\(^4\) For information on readmission after receiving ‘Fail’ standing and being required to withdraw from the Faculty, see Readmission (http://calendar.ubc.ca/vancouver/index.cfm?tree=2,273,0,0).

**Bachelor of Pharmaceutical Sciences > Degree Requirements**

The Bachelor of Pharmaceutical Sciences degree requires successful completion of the prescribed curriculum in Years One through Four as described in the table(s) below. B.P.Sc. with Honours (B.P.Sc. (Hons)) requires additional credit in Year Three and Year Four as described below.

<table>
<thead>
<tr>
<th>Year One – Mandatory subjects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 112</td>
<td>3</td>
</tr>
<tr>
<td>One of BIOL 153 or BIOL 155</td>
<td>6 (8)</td>
</tr>
<tr>
<td>One of CHEM 111 or CHEM 121</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 123</td>
<td>4</td>
</tr>
<tr>
<td>WRDS 150</td>
<td>3</td>
</tr>
<tr>
<td>One of MATH 100, MATH 102, MATH 104, MATH 120, MATH 180 or MATH 184</td>
<td>3 (4)</td>
</tr>
<tr>
<td>One of MATH 101, MATH 103, MATH 105, or MATH 121</td>
<td>3 (4)</td>
</tr>
<tr>
<td>PHAR 180</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total for Year One</strong></td>
<td>30 (34)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Two – Mandatory Subjects</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 211</td>
<td>4</td>
</tr>
<tr>
<td>CHEM 233</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 235</td>
<td>1</td>
</tr>
<tr>
<td>MICB 202</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 202</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 203</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 204</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 205</td>
<td>3</td>
</tr>
<tr>
<td>PHAR 280</td>
<td>1</td>
</tr>
<tr>
<td>STAT 200</td>
<td>3</td>
</tr>
<tr>
<td>------------------------</td>
<td>---</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total for Year Two</strong></td>
<td>30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Three – Mandatory subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 302</td>
</tr>
<tr>
<td>PHAR 303</td>
</tr>
<tr>
<td>PHAR 304</td>
</tr>
<tr>
<td>PHAR 305</td>
</tr>
<tr>
<td>PHAR 306</td>
</tr>
<tr>
<td>PHAR 307</td>
</tr>
<tr>
<td>PHAR 308</td>
</tr>
<tr>
<td>PHAR 370</td>
</tr>
<tr>
<td>PHAR 380</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td><strong>Total for Year Three</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year Four – Course-based option</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 470</td>
</tr>
<tr>
<td>PHAR 480</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td><strong>Total for Year Four</strong></td>
</tr>
<tr>
<td><strong>Minimum Total for Program</strong></td>
</tr>
</tbody>
</table>

1 BIOL 300 may be substituted for students who meet the prerequisite requirements.

2 Students that declare Honours may take an extra 3 Credits of electives in Year Three.

3 No more than 10 credits of Electives may be taken outside of Pharmaceutical Sciences for credit towards B.P.Sc. in Year Four in the Course-based option.

**Bachelor of Pharmaceutical Sciences Experiential Options in Year Four**

Students must apply for Experiential options in Year Three, by end of Term 1. There are two options: Research and Practicum. Students applying for Research or Practicum do not have to simultaneously apply for Honours.

Additionally, students may apply for Honours in Year Three, by the end of Term 1. Students eligible for Honours must maintain a minimum of 72% combined average in all years. The designation requires the preparation of a graduating thesis. Honours theses may be prepared from either Research Experiential or Practicum Experiential options.

**Research Experiential Option**

The Research Experiential Option provides a research experience equivalent to one full-time term of work in a professional area of Pharmaceutical Research including basic science, clinical, educational, outcome-related, pedagogical or other research in the pharmaceutical sciences (broadly interpreted). The knowledge gained is also intended to strengthen the individual’s applied skills for their future career in Academic or Industrial setting(s) to a national/international standard. Direct supervision by a member of faculty from Pharmaceutical Sciences is required, although co-supervision with a Researcher from another faculty is allowed.

**Year Four – Research Experiential Option**
Practicum Experiential Option

The Practicum Experiential Option provides experience equivalent to one full-time term of work placed directly with a governmental, contract research, manufacturing or other to industrial partner, to learn the skills required to be a functional member of these environments. The knowledge gained is also intended to strengthen the individual’s applied skills for their future career in Academic or Industrial setting(s). Direct supervision by a professional member of these sectors and co-supervision from a member of faculty from Pharmaceutical Sciences is required.

<table>
<thead>
<tr>
<th>Year Four – Practicum Experiential Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 470</td>
</tr>
<tr>
<td>PHAR 480</td>
</tr>
<tr>
<td>PHAR 495</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td><strong>Total for Year Four</strong></td>
</tr>
<tr>
<td><strong>Minimum Total for Program</strong></td>
</tr>
</tbody>
</table>

1 No more than 3 credits of electives can be taken outside of Pharmaceutical Sciences in Year Four in the Practicum Experiential option.

Experiential Options with Honours

The Honours option is applied for in Year Three at the end of Term 1. Honours students are required to enroll in an extra 3 credits of electives in Year Three. In Year Four, Honours students are expected to take 3 extra credits of electives (in any term) and enroll in PHAR 491 Honours Thesis. Honours is designed for students who wish to take part in advanced research and study and may lead to direct entry into advanced graduate programs (e.g. PhD).

<table>
<thead>
<tr>
<th>Year Four – Honours Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 470</td>
</tr>
<tr>
<td>PHAR 480</td>
</tr>
<tr>
<td>PHAR 485 or 495 (research experiential or practicum)</td>
</tr>
<tr>
<td>PHAR 491</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td><strong>Total for Year Four</strong></td>
</tr>
<tr>
<td><strong>Total for Program</strong></td>
</tr>
</tbody>
</table>

1 No more than 3 credits of electives can be taken outside of Pharmaceutical Sciences in Year Four in the Experiential options with honours.
Entry-to-Practice Doctor of Pharmacy

Entry-to-Practice Doctor of Pharmacy > Introduction

The program leading to the Entry-to-Practice Doctor of Pharmacy is designed to prepare graduates for contemporary and future pharmacy practice in healthcare settings such as community, primary care, ambulatory care, and hospital practice; and for industry, government, and other specialized fields. The program satisfies the requirements of the College of Pharmacists of BC for academic qualification for licensing in BC. It also meets standards approved by the Canadian Council for the Accreditation of Pharmacy Programs.

Applicants to the program should review the Faculty of Pharmaceutical Sciences policy on Essential Skills and Abilities for the Pharmacy Program to assess their ability to meet the required technical standards for admission to and successful completion of the program.

For the Bachelor of Science in Pharmacy, see B.Sc.(Pharm).

For the Flexible Doctor of Pharmacy, see Flexible Pharm.D.

For the graduate Doctor of Pharmacy, see Graduate Pharm.D.

Entry-to-Practice Doctor of Pharmacy > Academic Advising

Advising is not required for most students but is available on request. The Faculty reserves the right to make advising mandatory prior to registration for students with academic problems. Call 604-827-3485 to arrange an appointment with an advisor.

Entry-to-Practice Doctor of Pharmacy > Admission

The requirements below apply to students entering the E2P PharmD program in the 2021W Session.

For information regarding undergraduate admissions in 2020, please see the archived version of the 2019/20 Academic Calendar.

The Faculty will select for admission those students who not only demonstrate academic potential, but who also most aptly display a motivation to study pharmaceutical sciences and who demonstrate the qualities and skills most necessary to be a caring and competent pharmacist.

To be considered for admission to the four-year program, applicants must:

- Have completed 60 transferable credits of post-secondary coursework; and
- Meet a minimum overall average of 70% calculated on the last 30 credits of coursework and a minimum core average of 65%. For more information on the core average criterion, please visit the Faculty website.
- Have completed all prerequisite courses, with the exception of Humanities or Social Science and Elective credits, within the last 10 years at an approved college or university.
- Have completed all prerequisite courses for graded credit.
Note: Because enrolment in the program is limited and competitive, applicants should be aware that satisfying the minimum entrance requirements does not guarantee admission. Applicants with a competitive average will be invited for an interview. In the selection of applicants, preference is given to well-qualified residents of BC who are Canadian citizens or permanent residents of Canada. Special consideration may be given to Indigenous applicants and applicants from under-represented areas of BC.

Applications received with incomplete documentation or without the correct fees will not be processed. Late applications will not be considered.

Students are not admissible to the program directly from a high school or secondary school program (BC Grade 12 or equivalent obtained in any province). Admission to the Entry-to-Practice Pharm.D. is to the first year of a four-year program following at least two (2) post-secondary years. Students must complete at least 60 credits of coursework, including the prerequisites, by the end of the academic year in which the application is made.

The required (core) courses\(^1\) are:

Biology
- BIOL 112 or MICB 201, plus BIOL 121 and BIOL 140

Chemistry
- CHEM 111 &113 or CHEM 121 &123

English
- ENGL 112 or an equivalent 3 credit 1st year English composition course, plus 3 credits of ENGL at any year level

Mathematics
- MATH 102 (recommended) or MATH 100, 104, 110, 120, 180 or 184, plus MATH 103 (recommended) or MATH 101, 105 or 121

Students must also present the following prerequisite courses:

Cell Biology
- BIOL 200

Biochemistry
- BIOL 201 or BIOC 202

Organic Chemistry
- CHEM 233 & 235 or CHEM 203

Microbiology
- MICB 202

Statistics
- STAT 200 or 203, or BIOL 300

Humanities or Social Sciences
- 6 credits of humanities or social sciences courses\(^3\).

Elective(s)
- Sufficient credits to bring total to at least 60.

\(^1\) Acceptable in lieu of first year (1xx) requirements is the UBC Science One Program (plus 6 credits of English and BIOL 140). There may be additional alternate courses that satisfy the requirements listed in this table. Consult the Science Credit Exclusion List for a complete list.

\(^2\) SCIE 113 or WRDS 150 or WRDS 350 will be accepted in lieu of 3 credits of English. For more information on the English requirements, please consult the Faculty website (http://www.pharmsci.ubc.ca/programs/entry-practice-pharmd-degree).

\(^3\) Most courses offered by the Faculty of Arts at any year level. ENGL courses used to satisfy the 6-credits of English requirement cannot count towards satisfying the Humanities or Social Sciences requirement.

Applicants without these specific UBC courses need to present:

- two semesters of first-year university biology with a lab
- two semesters of first-year university chemistry with a lab
- two semesters of first-year university calculus
- one semester of first-year university English Composition (for which UBC gives first-year ENGL transfer credit)
- one semester of English at any year level (for which UBC gives ENGL transfer credit)
- one semester of second-year cell biology or genetics
- two semesters of second-year organic chemistry with a lab
• one semester of second-year microbiology
• one semester of introductory statistics
• one semester of introductory second-year biochemistry
• two semesters of humanities or social sciences coursework at any year level

Additional Requirements:
• Interview for selected applicants

Detailed information on admission requirements for all applicants is available from the Faculty (http://pharmsci.ubc.ca/programs/entry-practice-pharmd-degree).

Entry-to-Practice Doctor of Pharmacy > Post-Acceptance Requirements

The Faculty of Pharmaceutical Sciences requires all students to be fully compliant with the current guidelines against vaccine-preventable diseases prior to the commencement of practicum activities. These guidelines state proof of immunity status must be available and the practicum site can request a copy of immunization documentation from students at any time in preparation for or during a practicum. Prior to November 1st, or prior to the start of any practicum or patient contact (whichever occurs first), students should be enrolled in Student Health Services, who will screen for compliance with BC Guidelines that may include Tetanus/Diphtheria-Toxoid, Polio, MMR, Chickenpox and Hepatitis B, and a negative TB skin test result (if the skin test is positive, a chest x-ray is required). Failure to comply with documentation requirement could result in the individual being barred from the practicum. It is the responsibility of the student to ensure that all immunizations remain up-to-date throughout their time in the program.

All students will have their vaccination records reviewed. Students with a positive test result or those who are unable to comply with vaccination requirements for any communicable disease may face restrictions in the course of their pharmacy training and may be constrained in their ability to practice.

In addition, all students are required to obtain an influenza vaccination each year. If it is contraindicated for a student to receive the influenza vaccine, the student must declare their contraindication to the Office of Experiential Education in advance of the stated deadline in order to meet their pre-practicum requirements. Pharmacy students must comply with the institutional/corporate policy of the site to which they are assigned. Individual institutions and practice sites may have immunization, testing, or documentation requirements for student placements beyond those required by the Faculty. Information regarding these requirements will be provided to students when practicum site assignments are confirmed.

All newly admitted students to the Entry-to-Practice Doctor of Pharmacy program are required to register with the College of Pharmacists of B.C. by September 1st. Registration includes, but is not limited to, submission of a Notarized Identification form and a Criminal Record Check Authorization form. Students are required to renew their registration with the College each year that they are registered in the Entry-to-Practice Doctor of Pharmacy program. Additionally, students are responsible for informing the College of any changes to their registration as students in the Entry-to-Practice Doctor of Pharmacy program.

Entry-to-Practice Doctor of Pharmacy > Academic Regulations

Regular attendance is expected of all students in accordance with the University's Attendance Policy (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,36,0,0#182). Any student who misses 25% or more of a practicum will be required to repeat the practicum in its entirety. Any student who misses 25% or more of the Integration Activity sessions in a course will be required to repeat that course.
Students who, because of illness or other personal issues, are absent from an assessment or other mandatory activity must request Academic Concession (http://www.calendar.ubc.ca/vancouver/proof/edit/index.cfm?tree=3,329,0,0#26562) from the Faculty’s Office of Student Services. Requests may require supporting medical or other appropriate documentation.

In the Winter Session, the total for all courses taken may not exceed 45 credits, except with approval of the Dean. The maximum time allowed for the completion of the program is eight (8) years from admission to the program.

The passing mark for a course in the Faculty is 60%.

Assessments, including but not limited to term essays and examination papers, may be refused a passing mark if they are noticeably deficient in the quality of written English, including the correct use of grammar, spelling, and punctuation.

Although satisfactory academic performance is a prerequisite to advancement, it is not the sole criterion in the consideration of the suitability of a student for promotion or graduation. The Faculty reserves the right to delay a student's participation in practicum courses or to require a student to withdraw from the Faculty if that student is considered to be unsuited to proceed with the study or practice of pharmacy.

**Dean's Honour List**

Students promoted to second, third, or fourth year with a standing of 80% or better in the previous Winter Session will receive the notation "Dean's Honour List" on their records. A program of at least 85% of a full course load for the year must have been carried in order to receive this designation.

**Supplemental Examinations**

Supplemental examinations or other suitable assessment opportunities are possible in all non-practicum courses and in mandatory pass components within modular courses but will not be granted in all cases. Supplemental assessments are a privilege, not a right. The format of a supplemental assessment may vary depending on content and intended learning outcomes. The supplemental assessment will normally be a comprehensive assessment of the work of the full module or course.

1. A student’s eligibility for supplemental assessments will be determined by the Faculty’s Student Progress Committee, which communicates and implements Faculty policy (http://pharmsci.ubc.ca/current-students/undergraduate-students/entry-practice-pharmd-student) regarding supplemental assessments.
2. Students will be notified of their eligibility for supplemental assessments.
3. If a student fails a supplemental assessment, the course concerned must be repeated or a suitable substitute taken.
4. In the case of a final year student, a second supplemental assessment for non-practicum courses may be provided if unsuccessful in a first supplemental assessment.
5. Where a supplemental assessment is successfully completed, the new grade in the module or course will be 60%.

The above policy applies only to modules and courses administered by the Faculty. Faculties and departments responsible for other required or elective courses in the Doctor of Pharmacy program may have different policies on supplemental examinations.

**Academic Standing and Promotion Requirements**

Academic Standing will be determined at the end of each term of the Winter Session and at the end of the Summer Session. Elective courses are not taken into consideration in determining Academic Standing. One of three Academic Standings is assigned: Good Standing, Academic Probation, or Failed. All students are in Good Standing when first admitted to the Faculty.
A student who fails a required course must repeat the course, and will be placed on Academic Probation. The failed course must be successfully completed before the student may take any required course or any prerequisite course for the subsequent winter term.

Students who do not meet passing expectations for a second time, having previously been on Academic Probation in any year of their program, will be assigned a Failed standing and will be required to discontinue their studies in the program.

Returning to Good Standing from Academic Probation

Students who are on Academic Probation must pass all courses in an approved schedule of courses during their next registered session in order to return to Good Standing. Students must meet with the Director of Student Services to establish an appropriate schedule of courses.

Readmission after Being Required to Discontinue

Readmission after being required to discontinue is not guaranteed. Readmission decisions take into account the amount of space available as well as the size and strength of the applicant pool in a given year. All students seeking to return after being required to discontinue must apply to be readmitted (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,273,0,0#13984) to the program and must provide evidence of the steps that they have taken to address the issues that led to being required to discontinue. The earliest a student may be readmitted is one full year (12 months) following the requirement to discontinue. Requirements for readmission depend on the year level a student was in when they left.

Appeals

A student has the right to appeal a decision of the program to the Dean’s Advisory Committee on Student Appeals (http://pharmsci.ubc.ca/current-students/undergraduate-students/entry-practice-pharmd-students).

For information on Senate Appeals on Academic Standing please refer to Appeal Procedure (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,53,104,0#273).

Entry-to-Practice Doctor of Pharmacy > Degree Requirements

The first week of the first year will include both scheduled coursework and a mandatory formal orientation program. This orientation will introduce students to the Faculty, its expectations for academic and professional conduct, and some of the skills required to succeed in the program.

<table>
<thead>
<tr>
<th>Professional Year 1 (PY1)</th>
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<tbody>
<tr>
<td>PHRM 100</td>
<td>18</td>
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<tr>
<td>PHRM 111</td>
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<td>PHRM 131</td>
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<td>PHRM 161</td>
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<tr>
<td>PHRM 171¹</td>
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<table>
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<tr>
<td>PHRM 272(^1)</td>
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<td><strong>Total Credits</strong></td>
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**Professional Year 3 (PY3)**

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<tr>
<td>PHRM 312</td>
<td>12</td>
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<td>PHRM 341</td>
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<tr>
<td>PHRM 361</td>
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<tr>
<td>PHRM 371(^1)</td>
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<tr>
<td><strong>Electives(^2)</strong></td>
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<td><strong>Total Credits</strong></td>
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**Professional Year 4 (PY4)**

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<td>PHRM 471</td>
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<td>PHRM 481</td>
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<tr>
<td><strong>Total Credits</strong></td>
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</tr>
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</table>

**Total Credits for the Program**

<table>
<thead>
<tr>
<th>Credits</th>
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<tbody>
<tr>
<td>166</td>
</tr>
</tbody>
</table>

\(^1\) Completed in the summer after the prior academic term.

\(^2\) Of the 9 elective credits required in the program, all must be chosen from offerings within or approved by the Faculty. A minimum of 3 credits must be taken from PHAR/PHRM elective course offerings. Non-PHAR/PHRM courses may be taken for Credit/D/Fail standing if permitted by the Faculty offering the course. As scholars, pharmacy students take responsibility for excellence by learning continuously. Courses taken prior to entry to the program and repeat courses will not be credited toward elective requirements.

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**Practicums and Additional Expenses**

Practicums are scheduled at a variety of experiential education sites including, but not limited to, inpatient and outpatient pharmacy practice settings, governmental agencies and institutions, manufacturers in the pharmaceutical industry, academic institutions, and selected pharmacy organizations. Practicum sites are approved as affiliated teaching sites by the Faculty and are reviewed and coordinated by University-appointed personnel. Scheduling of practicums is dependent on both site and practice educator availability; therefore, placement preferences cannot be guaranteed. Students should expect to be placed at practicum sites anywhere throughout British Columbia and should include the travel and accommodation costs for all practicum experiences in estimating their total program-related expenses.

**College Registration Requirement**

Students must register with the College of Pharmacists of British Columbia by September 1st during their first year in the Faculty.
Students must maintain registration with the College of Pharmacists of British Columbia while they are in the program. Proof of such registration will be a requirement for admission into both the Pharmacy Practice Centre and practicum courses.

**Interprofessional Education**

Students must meet the interprofessional education requirements of the program, which include activities embedded in the program’s required courses. Students are also encouraged to take interprofessional elective courses (consult the Faculty-Approved Electives list for more information) and participate in extracurricular interprofessional activities.

**Flexible Doctor of Pharmacy**

**Flexible Doctor of Pharmacy > Introduction**

The Flexible Doctor of Pharmacy program is for individuals who have completed a baccalaureate degree in pharmacy. It is designed to prepare graduates for contemporary and future pharmacy practice in direct patient care settings such as outpatient, inpatient, primary care, ambulatory care, and non-direct patient care settings such as research, health policy, education, and other specialized fields.

For information on the Entry-to-Practice Doctor of Pharmacy Program, see here.

For the Graduate Doctor of Pharmacy, see Graduate Pharm.D.

**Flexible Doctor of Pharmacy > Academic Advising**

Advising is not required for most students but is available on request. The Faculty reserves the right to make advising mandatory prior to registration for students with academic problems. Call 604.822.1945 or email pharmsci.flexpharmd@ubc.ca to arrange an appointment with an advisor.

**Flexible Doctor of Pharmacy > Admission**

The Faculty will select for admission those students who hold an entry-to-practice degree in pharmacy, demonstrate academic potential and also aptly display a motivation to study pharmaceutical sciences and exemplify the highest professional standards and ideals of a health care provider.

- **To be considered for admission to the program, applicants must:**
  - hold current registration as a pharmacist in BC, or
  - hold registration (Qualifying Examination) with the Pharmacy Examining Board of Canada and be eligible for registration with the College of Pharmacists of BC (http://www.bcpharmacists.org/pharmacist-canada-cfta). Students with questions regarding this eligibility are encouraged to contact the College.
  - meet a minimum average of 65% on the last 30 credits of post-secondary education.
  - demonstrate a minimum level of English language proficiency. Please refer to UBC’s English Language Admission Standard (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,19,911,0#18812).

Note: Because enrolment in the program is limited and competitive, applicants should be aware that satisfying the minimum entrance requirements does not guarantee admission but only ensures eligibility for selection. Such selection shall be solely within
the discretion of the Faculty. In the selection of applicants, preference is given to well-qualified residents of BC who are Canadian citizens or permanent residents of Canada. Special consideration may be given to Indigenous applicants and applicants from under-represented areas of BC. The program will give consideration to new and experienced pharmacists who demonstrate their academic suitability in the admissions process.

Applications received with incomplete documentation or without the correct fees will not be processed. Late applications will not be considered.

- **Additional Requirements:**
  - Supplemental Application:
    - Proof of registration as a pharmacist in BC or eligibility for registration in BC.
    - Personal Statement, outlining the applicant's professional practice, reasons for pursuing a Doctor of Pharmacy degree and how the program will benefit the applicant's practice of pharmacy (format provided in the application). Examples of work may be included to support the personal statement.
    - Current résumé/curriculum vitae - including all pharmacy work experience.
  - Interview for selected applicants.

Detailed information on admission requirements for all applicants is available from the Faculty.

**Flexible Doctor of Pharmacy > Post-Acceptance Requirements**

The Faculty of Pharmaceutical Sciences requires all students to be fully compliant with the current guidelines against vaccine-preventable diseases prior to the commencement of clinical activities. These guidelines state proof of immunity status must be available and the clinical site can request a copy of immunization documentation from students at any time in preparation for or during a clinical placement. Six months before the first practicum, students are required to complete an immunization review. It is highly recommended that students complete their immunization review with UBC’s Student Health Services, who will screen for compliance with BC Guidelines that may include Tetanus/Diphtheria-Toxoid, Polio, MMR, Chickenpox and Hepatitis B, and a negative TB skin test result (if the skin test is positive, a chest x-ray is required). Students who are unable to complete their immunization review with Student Health Services, should contact the Flex PharmD Program Manager for other options. Failure to comply with documentation requirement could result in the individual being barred from practicums. It is the responsibility of the student to ensure that all immunizations remain up-to-date throughout their time in the program.

All students will have their vaccination records reviewed. Students with a positive test result or those who are unable to comply with vaccination requirements for any communicable disease may face restrictions in the course of their pharmacy training and may be constrained in their ability to practice.

In addition, all students are required to obtain an influenza vaccination each year. If it is contraindicated for a student to receive the influenza vaccine, the student must declare their contraindication to the Office of Experiential Education in advance of the stated deadline in order to meet their pre-practicum requirements. Pharmacy students must comply with the institutional/corporate policy of the site to which they are assigned. Individual institutions and practice sites may have immunization, testing or documentation requirements for student placements beyond those required by the Faculty. Information regarding these requirements will be provided to students when practicum site assignments are confirmed.

Students in the Flexible Doctor of Pharmacy program must be registered as a full pharmacist with the College of Pharmacists of British Columbia [http://www.bcpharmacists.org/canada-ait](http://www.bcpharmacists.org/canada-ait) before the start of their first Advanced Pharmacy Practice Experience (APPE).

**Flexible Doctor of Pharmacy > Academic Regulations**
Students are expected to complete courses within each course’s suggested timeframe and participate in all scheduled course discussions and learning activities. Participation grades are assigned for most courses.

The maximum time allowed for the completion of the program is six (6) years from the date of enrolment in the program. In extenuating circumstances, a student may apply for additional time to complete his/her degree. A request to the Faculty’s Student Services office will be reviewed on a case-by-case basis and will require approval by the Director, Flex PharmD.

Students may seek permission for an academic leave (time away from UBC studies) of up to one year. Before taking leave, all students are strongly advised to discuss their plans with an academic advisor in the Faculty.

The passing mark for a course in the Faculty is 60%.

Any student whose academic record within the program is found to be unsatisfactory may be required to withdraw from the program.

Assessments, including but not limited to course assignments, may be refused a passing mark if they are noticeably deficient in the quality of written English, including the correct use of grammar, spelling, and punctuation.

Although satisfactory academic performance is a prerequisite to continuation, it is not the sole criterion in the consideration of the suitability of a student for continuation or graduation. The Faculty reserves the right to require a student to withdraw from the Faculty if that student is considered to be unsuited to proceed with the study or practice of pharmacy.

**Supplemental Examinations**

Supplemental examinations are not granted to students registered in the Flex PharmD program. A failure in any course requires the student to repeat the course at the next offering.

**Academic Performance**

The Faculty’s Flex Student Progress & PLAR Committee monitors academic performance. Academic performance review occurs in two phases.

- **Phase 1**: Completion of PHRM 451, 452, 453 and 461.
- **Phase 2**: Completion of every 10-12 credits of coursework.

Students who fail more than two didactic or more than two experiential courses during the program, or who fail any course twice, will be required to discontinue their studies in the program.

**Readmission after Being Required to Discontinue**

Readmission after being required to discontinue is not guaranteed. Readmission decisions take into account program capacity, as well as the size and strength of the applicant pool in a given year. All students seeking to return after being required to discontinue must apply to be readmitted (Calendar page: [http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,273,0,0#13984](http://www.calendar.ubc.ca/vancouver/index.cfm?tree=2,273,0,0#13984)) to the program and must provide evidence of the steps that they have taken to address the issues that led to being required to discontinue. The earliest a student may be readmitted is one full year (12 months) following the requirement to discontinue.

**Prior Learning Assessment and Recognition (PLAR)**

Students in the program have the opportunity to request credit for prior learning. Students can initiate a request for PLAR at any time after admission to the program; however, they are advised to select challenge option(s) within the first six months in the
program. This is essential to meet application submission deadlines, to enable them to plan when they will register into courses associated with their challenge option, and to begin planning for portfolio development where required by the option selected.

Examination or Abbreviated Portfolio Assessment for selected courses only are the options available for didactic courses. Abbreviated Portfolio Assessments are the two options to challenge for credit for APPE, which are also called “practicum” (PHRM 491 – 496). If a PLAR challenge for a course or APPE is successful, the credits awarded are an acknowledgment that prior learning is substantially similar to what would be learned if the student took that course in the Flex PharmD Program. Credits that are awarded through PLAR appear on the student’s transcript.

The maximum credit can be attained through PLAR is 50% of the overall credits in the Flex PharmD program.

**Appeals**

A student has the right to appeal a progress decision of the program to the Dean’s Advisory Committee on Student Appeals (http://pharmsci.ubc.ca/current-students/undergraduate-students/flex-pharmd-students).

For information on Senate Appeals on Academic Standing please refer to Appeal Procedure (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,53,104,0).

**Flexible Doctor of Pharmacy > Degree Requirements**

The first week of the first term will include both scheduled coursework and a formal orientation program at the UBC Vancouver campus. Attendance in-person is mandatory. This orientation will introduce students to the Faculty, its expectations for academic and professional conduct, and some of the skills required to succeed in the program. Students must complete all of the program course requirements to obtain the degree.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
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<td>PHRM 452</td>
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<tr>
<td>PHRM 495</td>
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</table>
Practicums and Additional Expenses

Required practicum sites that have been approved as affiliated teaching sites by the Faculty will be supervised by University-appointed personnel. These practicums may be scheduled in community and hospital pharmacies, health care agencies and institutions, manufacturers in the pharmaceutical industry, and with selected pharmacy organizations. All program practicums are considered Advanced Pharmacy Practice Experiences (APPE).

Students will be required to pay the Flexible Doctor of Pharmacy practice fee. See Program and Course Fees (Calendar page: [http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,296,0,0#18096](http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,296,0,0#18096)). Students should be prepared for practicums in sites around BC and therefore should also include travel and accommodation costs for these experiences in estimating total personal expenses.

Bachelor of Science in Pharmacy

Bachelor of Science in Pharmacy > Introduction

Important Note: Admission to the Bachelor of Science in Pharmacy (B.Sc. (Pharm.)) is suspended. Applicants interested in an entry-to-practice pharmacy degree should consult the admissions requirements for the Entry-to-Practice Doctor of Pharmacy.

The program leading to the Bachelor of Science in Pharmacy is designed to prepare graduates to enter a wide variety of careers associated with pharmacy in community pharmacies and hospitals, in industry and government service, and in other specialized fields. The program satisfies the requirements of the College of Pharmacists of BC for academic qualification for licensing in BC. It also meets standards approved by the Canadian Council for the Accreditation of Pharmacy Programs. Note that the accreditation of the Bachelor of Science in Pharmacy degree program by the Canadian Council for Accreditation of Pharmacy Programs will expire on December 31, 2020.

Applicants to the Bachelor of Science in Pharmacy should review the Faculty of Pharmaceutical Sciences policy on Essential Skills and Abilities for the Pharmacy Program ([http://pharmsci.ubc.ca/sites/pharmsci.ubc.ca/files/Policy-on-Essential-Skills-for-Pharmacy-June-2015.pdf](http://pharmsci.ubc.ca/sites/pharmsci.ubc.ca/files/Policy-on-Essential-Skills-for-Pharmacy-June-2015.pdf)) to assess their ability to meet the required technical standards for admission to and successful completion of the program.

Bachelor of Science in Pharmacy > Academic Advising

Important Note: Admission to the Bachelor of Science in Pharmacy (B.Sc. (Pharm.)) is suspended. Applicants interested in an entry-to-practice pharmacy degree should consult the admissions requirements for the Entry-to-Practice Doctor of Pharmacy.

Advising is not required for most students but is available on request. The Faculty reserves the right to make advising mandatory prior to registration for students with academic problems. Call 604.827.0777 to arrange an appointment with an advisor.

Bachelor of Science in Pharmacy > Admission
Important Note: Admission to the Bachelor of Science in Pharmacy (B.Sc. (Pharm.)) is suspended. Applicants interested in an entry-to-practice pharmacy degree should consult the admissions requirements for the entry-to-practice Doctor of Pharmacy.

To be considered for admission to the four-year program, a student must first achieve an average grade of at least 65% in the courses listed below, or their equivalents, at an approved college or university. Because of the limitations in clinical clerkship sites, laboratory facilities, and resources, enrolment is limited.

The Faculty will select for admission those students who not only demonstrate academic potential, but who also most aptly display a motivation to study pharmaceutical sciences and who demonstrate the qualities and skills most necessary to be a caring and competent pharmacist. Candidates may be invited for an interview at the discretion of the admissions committee.

Note: Because enrolment in the program is limited and competitive, applicants should be aware that satisfying the minimum entrance requirements does not guarantee admission. Applicants with a competitive average will be invited for an interview. In the selection of applicants, preference is given to well-qualified residents of BC who are Canadian citizens or permanent residents of Canada. Special consideration may be given to Aboriginal applicants and applicants from under-represented areas of BC.

Applications received with incomplete documentation or without the correct fees will not be processed. Late applications will not be considered.

Students are not admissible to the program directly from a high school or secondary school program (BC Grade 12 or equivalent obtained in any province). Admission to the program is to the first year of a four-year program following at least one post-secondary year. Students must complete at least 30 credits of coursework by the end of the academic term in which application is due. The required courses are:

- **Biology**  
  BIOL 112 or MICB 201, plus BIOL 121 and BIOL 140

- **Chemistry**  
  CHEM 111 & 113 or CHEM 121 & 123

- **English**  
  1st year (6 credits)\(^1\). ENGL 112 is recommended.

- **Mathematics**  
  MATH 102 (recommended) or MATH 100, 104, 120, 180 or 184, plus MATH 103 (recommended) or MATH 101, 105 or 121

- **Physics**  
  PHYS 101

\(^1\) SCIE 113 will be accepted in lieu of 3 credits of first-year English. The English requirement may be waived for students who have a degree from an eligible institution.

Also acceptable is the UBC Science One (http://www.scienceone.ubc.ca) Program (plus 6 credits of first-year English).

Applicants without these specific UBC courses need to present a full year each (i.e., 2 semesters) of:

- first-year university biology with a lab
- first-year university chemistry with a lab
- first-year university English (for which UBC gives transfer credit)
- first-year university calculus
- first-year university physics with a lab (also acceptable is a one-semester physics course that has a prerequisite requirement of PHYS 12)

Students who have any doubts about their preparedness for the first-year Pharmacy program should consult an Advisor (pharmsci.ssreception@ubc.ca), 604.827.2673. Non-UBC students taking courses in BC may also wish to consult the BC Transfer
Guide ([http://www.bccat.bc.ca](http://www.bccat.bc.ca)).

**Additional Requirements**

- Pharmacy College Admission Test (PCAT)
- Pharmacy Online Undergraduate Application
- Two letters of reference
- Interview for selected applicants

Detailed information on admission requirements for all applicants is available from the Faculty ([http://pharmsci.ubc.ca](http://pharmsci.ubc.ca)).

**Bachelor of Science in Pharmacy > Registration**

**Important Note:** Admission to the Bachelor of Science in Pharmacy (B.Sc. (Pharm.)) is suspended. Applicants interested in an entry-to-practice pharmacy degree should consult the admissions requirements for the Entry-to-Practice Doctor of Pharmacy.

Applicants who are accepted will be sent a letter of acceptance and details of the registration procedures.

**Bachelor of Science in Pharmacy > Post-Acceptance Requirements**

**Important Note:** Admission to the Bachelor of Science in Pharmacy (B.Sc. (Pharm.)) is suspended. Applicants interested in an entry-to-practice pharmacy degree should consult the admissions requirements for the Entry-to-Practice Doctor of Pharmacy.

The Faculty of Pharmaceutical Sciences requires all students to be fully compliant with the current guidelines against vaccine-preventable diseases prior to the commencement of clinical activities. These guidelines state proof of immunity status must be available and that the clinical site can request a copy of immunization documentation from students at any time in preparation for or during a clinical placement. Prior to November 1st, or prior to the start of any clinical rotations or patient contact (whichever occurs first), all first-year undergraduate students must submit a health record which evidences immunizations (Tetanus/Diphtheria-Toxoid, Polio, MMR, Chickenpox and Hepatitis B) and a negative TB skin test result (if the skin test is positive, a chest x-ray is required) to the UBC Student Health Service. Immunizations are available from family doctors, public health departments and from the UBC Student Health Service.

Failure to comply with documentation requirement could result in the individual being barred from the clinical setting.

All students will have their vaccination records reviewed. Students with a positive test result for any communicable disease may face restrictions in the course of their pharmacy training and may be constrained in their ability to practice.

In addition, all students are required to obtain an influenza vaccination each year. In addition, all students must be fitted for a face mask. If it is contraindicated for a student to receive the influenza vaccine, the student must have a current written prescription for antiviral medication and will be required to wear a mask at all times during some clinical placements. In the event of an influenza outbreak at the healthcare institution in which a student is placed, evidence of a current influenza vaccination must be provided. Pharmacy students must meet the current immunization requirements of the Health Authority in which they are doing their placement.

All newly admitted students to the Bachelor of Science in Pharmacy program are required to register with the College of Pharmacists of B.C. by November 1. Registration includes, but is not limited to, submission of a Notarized Identification form and a
Criminal Record Check Authorization form.

Bachelor of Science in Pharmacy > Academic Regulations

Important Note: Admission to the Bachelor of Science in Pharmacy (B.Sc. (Pharm.)) is suspended. Applicants interested in an entry-to-practice pharmacy degree should consult the admissions requirements for the Entry-to-Practice Doctor of Pharmacy.

Regular attendance is expected of students in all their classes (including lectures, laboratories, tutorials, and seminars). Students who neglect their academic work and assignments may be excluded from the final examinations. Students who are unavoidably absent because of illness or disability should report to their instructors at the earliest opportunity.

Students who, because of illness or other personal issues, are absent from a December or April examination must request Academic Concession from the Pharmacy Student Services office. All requests must be supported by medical or other appropriate documentation. Deferred exams for Pharmacy (PHAR) courses will be scheduled by the Faculty.

In any course that involves laboratory/tutorial work a student must complete the laboratory/tutorial assignments with a satisfactory record before being admitted to the written examinations of the course. A student may be required by the Faculty to discontinue such a course, during any term, because of failure to maintain a satisfactory standing in laboratory/tutorial work, or because of absence from an appreciable number of laboratory/tutorial periods through illness or other causes.

The passing mark for a course in the Faculty is 60%.

A student who has failed two or more courses for a total of 12 credits or more in a Winter Session will be considered to have failed in the work of that session.

Any student whose academic record, as determined by the tests and examinations of the first term, is found to be unsatisfactory, may be required to discontinue attendance at the University for the remainder of the session.

Term essays and examination papers may be refused a passing mark if they are noticeably deficient in the quality of written English, including the correct use of grammar, spelling, and punctuation.

Although satisfactory academic performance is a prerequisite to advancement, it is not the sole criterion in the consideration of the suitability of a student for promotion or graduation. The Faculty reserves the right to require a student to withdraw from the Faculty if that student is considered to be unsuited to proceed with the study or practice of pharmacy.

Disruption of Studies

Between 2015 and 2018, the Bachelor of Science in Pharmacy (B.Sc.(Pharm.)) was phased out year by year as the Entry-to-Practice Doctor of Pharmacy (Pharm.D.) program was phased in.

Students must meet the degree requirements for the program they entered.

Students in the B.Sc.(Pharm.) program who experience a disruption in their studies (e.g. due to extended absence, medical leave, withdrawal, or failure) may not be able to complete the degree requirements as described in the Academic Calendar for the year they were admitted to the program as some courses will no longer be offered.
Each student's circumstance will be different and will be reviewed on a case-by-case basis with the Associate Dean, Academic. A combination of completed B.Sc.(Pharm.) and available Pharm.D. course offerings will be used to satisfy the degree requirements set out in this Academic Calendar in the Bachelor of Science in Pharmacy degree program requirements section.

For B.Sc.(Pharm.) students who did not graduate by 2018, every reasonable effort will be made to accommodate the student's completion of the degree requirements within a reasonable duration of study. Note that the accreditation of the Bachelor of Science in Pharmacy degree program by the Canadian Council for Accreditation of Pharmacy Programs will expire on December 31, 2020.

**Readmission**

Readmission to Year 1 and Year 2 of the Bachelor of Science in Pharmacy program is no longer available. Readmission to Year 3 and Year 4 will no longer be available after the 2019 Winter Session.

**Dean's Honour List**

Students promoted to second, third, or fourth year with a standing of 80% or better in the previous Winter Session will receive the notation "Dean's Honour List" on their records. A program of at least 90% of a full course load for the year must have been carried in order to receive this designation.

**Promotion Requirements**

To be promoted, a student in the Faculty of Pharmaceutical Sciences must pass all of the required courses of the program year in which the student is registered and obtain a minimum average standing of 60% in the required courses of the program year in which the student is registered.

The following notes apply to these requirements:

- Required courses are used for this computation (elective courses are excluded). Failure in elective courses requires that the course be repeated, or an approved alternative course be taken.
- A student who by these regulations is not promotable may be required to repeat the work of that year or to withdraw from the Faculty and will not be able to take any of the required courses of subsequent years.
- A student who fails to meet promotion standards for a second time, either in a repeated year or a subsequent year, will normally be required to withdraw from the Faculty.
- Courses for which credit has not been obtained must be repeated (or permissible substitutes taken) in the next regular session attended. In the Winter Session, the total for all courses taken may not exceed 45 credits, except with approval of the Dean.

**Supplementals and Examinations for Higher Standing**

Supplemental examinations are not available in all PHAR courses. In courses in which proficiency is judged on a continuing basis throughout a term, or in which final examinations are not given, or in courses where the final examination contributes less than 40% of the course grade, no supplemental examinations are provided. In courses where supplemental examinations are allowed, it is recommended that the supplemental examination should be a comprehensive examination of the full year's work and should receive a substantial value of the total mark. The supplemental mark should replace all of the marks received on the written examinations of the lecture content of the course.

1. In PHAR courses where supplemental examinations are allowed, a student who has obtained an average of at least 50% in the final examinations of the session may be granted supplemental examinations in the subject or subjects failed, provided a final grade of not less than 40% was obtained. Notices will be sent to students to whom such supplemental examinations have been granted.
2. A supplemental examination may be written only once except in the case of a final year student, who may write twice. Should a supplemental be failed the course concerned must be repeated or a suitable substitute taken.

3. Where supplemental privileges are granted, the standing will be recalculated.

4. The above policy applies only to courses administered by the Faculty. Faculties and departments responsible for other required or elective courses in the pharmacy program may have different policies on supplementals and examinations for higher standing.

Bachelor of Science in Pharmacy > Degree Requirements

Important Note: Admission to the Bachelor of Science in Pharmacy (B.Sc. (Pharm.)) is suspended. Applicants interested in an entry-to-practice pharmacy degree should consult the admissions requirements for the Entry-to-Practice Doctor of Pharmacy.

Bachelor of Science in Pharmacy

The first week of the first year will include both scheduled coursework and a formal orientation program. This orientation will introduce students to the Faculty, its expectations for academic and professional conduct, and some of the skills required to succeed in the program.

<table>
<thead>
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### Third Year

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### Fourth Year

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<td>PHAR 489(^4)</td>
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\(^1\) Taken in the summer after completing second year.
\(^2\) Taken in the summer after completing third year.
\(^3\) Of the 18 elective credits required in the program, 6 must be chosen from outside the Faculty and 12 must be chosen from offerings within or approved by the Faculty.
\(^4\) Students must meet minimum requirements for community and institutional practice experience before opting for alternate practice sites.
Clinical Clerkships and Additional Expenses

Required clinical clerkships in facilities that have been approved as affiliated teaching sites by the Faculty will be supervised by University-appointed personnel. These clerkships may be scheduled in community and hospital pharmacies, health care agencies and institutions, manufacturers in the pharmaceutical industry, and with selected pharmacy organizations. Clerkship sites outside the Greater Vancouver area are also used. All students will be required to complete a portion of their clerkship time outside the Greater Vancouver area.

Students will be required to pay the B.Sc. (Pharm.) practice fee. See Program and Course Fees (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,296,0,0#18093). Students should be prepared for clinical clerkships in sites around BC and therefore should also include travel and accommodation costs for these experiences in estimating total personal expenses.

College Registration Requirement

Students must maintain registration with the College of Pharmacists of British Columbia while they are in the program.

Interprofessional Education

Students must meet the interprofessional education requirements of the program, including use of the online Interprofessional Passport (http://www.chd.ubc.ca/students/interprofessional-education-passport) to record mandatory and elective interprofessional activities. Students are also encouraged to take Interprofessional Health and Human Service (IHHS) courses, all of which are Faculty-approved electives. For more information see Health Disciplines (http://www.chd.ubc.ca/).

Credit/D/Fail

Students in the Bachelor of Science in Pharmacy program are permitted to take a maximum of 6 credits of non-pharmacy approved electives to satisfy degree requirements in compliance with the University's Credit/D/Fail policy. See Credit/D/Fail (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,42,910,0#18786).

Continuing Pharmacy Professional Development

Continuing Pharmacy Professional Development is sponsored by the UBC Faculty of Pharmaceutical Sciences.

Mission Statement: To advance the knowledge, skills, attitudes, and abilities of pharmacists and other health care professionals in British Columbia through leadership and innovation in continuing professional development, service, and scholarly activity, that support patient-centered, outcomes-focused care.

The goals of the Continuing Pharmacy Professional Development include the following:

1. To enhance communication, collaboration, and services through optimization of resources.
2. To identify continuing pharmacy professional development needs.
3. To develop and deliver quality, accessible learning programs that deliver innovative curricula and support patient-centered, outcomes-focused care.
4. To explore and implement innovative programs and learning opportunities to support the advancement of pharmacy practice and specialized pharmaceutical care.
To foster advancement, innovation, and effectiveness through continuous evaluation and scholarship.

Residency Programs

Residency Programs > Pharmacy Practice Residency Program

A number of hospitals in BC offer a one-year post-graduate pharmacy practice residency program in affiliation with the Faculty of Pharmaceutical Sciences and the BC Branch of the Canadian Society of Hospital Pharmacists. These residencies are conducted following standards established for accreditation by the Canadian Hospital Pharmacy Residency Board. Residencies normally commence in June of each year. Those selected are registered as Pharmacy residents in the Faculty and are assessed the applicable Tuition fee as indicated in Fees (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,266,772,0#17995). The residencies are offered by the following agencies/authorities: Lower Mainland Pharmacy Services (Fraser Health, Vancouver Coastal Health, Providence Health Services), Northern Health, Vancouver Island Health, Interior Health, and BC Cancer Agency.

Admission

Graduates of any Canadian pharmacy school are eligible for admission. All candidates must satisfy the requirements for registration with the College of Pharmacists of BC. Graduates of foreign pharmacy schools must be registrants of the Pharmacy Examining Board of Canada. The selection is highly competitive and is determined using a matching process conducted by the BC Pharmacy Practice Residency Program Committee and the Canadian Society of Hospital Pharmacists. The decision is based on health authority preferences, interviews, letters of reference, and academic performance during the undergraduate pharmacy program.

Application

Applications are submitted online and descriptive literature may be obtained from the Canadian Society for Hospital Pharmacists (http://www.cshp.ca/residency). Inquiries may also be directed to the residency coordinators in any of the health authorities offering a residency program. The closing date for submission of completed applications is usually in October for entry into programs the following June.

Program Requirements

The residency program consists of required and elective rotations in the resident's health authority and other affiliated hospitals and agencies. A certificate signifying completion of the program is awarded jointly by the health authority and the University based on satisfactory performance in rotation assignments, oral and written assessments, and project work as determined by the BC Pharmacy Practice Residency Program Committee.

Residency Programs > Community Pharmacy Residency Program

A one-year post-graduate community pharmacy residency program is offered by the Faculty of Pharmaceutical Sciences. The program has been developed through the co-operative efforts of representatives from the College of Pharmacists of BC, the B.C. Pharmacy Association, practising community pharmacists, and the Faculty. These groups also provide on-going support and guidance as participants in the Community Pharmacy Residency Program Committee. Those selected are registered as residents in the Faculty and are assessed the applicable program fee as indicated in Program and Course Fees (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,266,772,0#17995).

Admission

Graduates of any Canadian pharmacy school are eligible for admission. All candidates must satisfy the requirements for registration with the College of Pharmacists of BC. Graduates of foreign pharmacy schools must be registrants of the Pharmacy Examining Board of Canada. The selection is highly competitive and is determined using a matching process conducted by the BC Pharmacy Practice Residency Program Committee and the Canadian Society of Hospital Pharmacists. The decision is based on health authority preferences, interviews, letters of reference, and academic performance during the undergraduate pharmacy program.
Important Note: Admission to the Community Pharmacy Residency Program is suspended for 2020/21.

Graduates of any Canadian pharmacy school are eligible for admission. All applicants must satisfy the requirements for registration as a pharmacist with the College of Pharmacists of BC. The selection is highly competitive and is determined using a process conducted by the Community Pharmacy Residency Program Committee based on applicant interviews, letters of reference, as well as academic and clinical performance during the undergraduate pharmacy program.

Residency Program Completion Requirements

The residency program consists of required and elective rotations in selected community pharmacies, interdisciplinary clinics, and affiliated agencies. A certificate signifying completion of the program is awarded by the Faculty based on satisfactory performance in rotation assignments, oral and written assignments, and project work as determined by the program committee.

Application

Application forms and descriptive literature may be obtained from the Faculty (http://pharmsci.ubc.ca/programs/community-pharmacy-residency) Inquiries may also be directed to the community pharmacy residency coordinator. The closing date for submission of completed applications is January 31 for entry into the program the following July 1.

Graduate Programs

Graduate Programs > Master of Science and Doctor of Philosophy

The Faculty offers opportunities for advanced study leading to the Master of Science (M.Sc.) and Doctor of Philosophy (Ph.D.) in the following research areas: nanomedicine, drug discovery, drug metabolism, pharmacokinetics and toxicology, pharmacogenomics and pharmacogenetics, drug actions and disease processes, neuropharmacology, cancer pharmacology, pharmaceutical health outcomes and pharmacotherapeutics, and pharmaceutical education.

The programs are open to those holding undergraduate or graduate degrees from recognized universities, whether in pharmacy or other related disciplines. A minimum TOEFL score of 600 (paper), 250 (computer), or 100 (internet) is required.

For more information, visit the Faculty (http://www.pharmsci.ubc.ca).

Graduate Programs > Graduate Doctor of Pharmacy

Important Note: Admission to the Graduate Doctor of Pharmacy (Pharm.D.) is suspended. Practising pharmacists interested in earning the Doctor of Pharmacy degree should consult the Flexible Doctor of Pharmacy admission requirements. Applicants interested in an entry-to-practice pharmacy degree should consult the admissions requirements for the Entry-to-Practice Doctor of Pharmacy.

The Faculty also offers opportunities for study leading to the Graduate Doctor of Pharmacy (Pharm.D.) in the field of clinical pharmacy. The Graduate Pharm.D. program (http://pharmacy.ubc.ca/programs/degree-programs/PharmD) is open to applicants who possess a B.Sc. in Pharmacy or equivalent and are eligible for registration with the College of Pharmacists of BC. Students must observe the following:

1. A student may apply for admission to the program by writing to the Graduate Pharm.D. program Admissions Committee,
Faculty of Pharmaceutical Sciences.

2. Class size is limited. All application materials must normally be received by January 15 to be considered for admission in the same year.

3. All students are admitted to the program only at the start of the Winter Session (the beginning of September).

4. Applicants for the Graduate Pharm.D. program must hold a bachelor's degree in pharmacy or equivalent, with 80% or higher in at least 12 credits of coursework, and at least 74% in the remaining coursework in the last two years of the B.Sc. in Pharmacy program and:

   1. hold current registration as a pharmacist in BC, or
   2. hold registration (Qualifying Examination) with the Pharmacy Examining Board of Canada and be eligible for registration as a qualifying candidate with the College of Pharmacists of BC. Students with questions regarding this eligibility are encouraged to contact the College.

5. Applicants who have a bachelor's degree, or its academic equivalent, that does not meet the requirements of section 4 above, but who have had sufficient formal training and relevant professional experience to offset such deficiencies may be granted admission on the approval of the Faculty.

6. A residency in hospital or community pharmacy practice is desired, but not mandatory.

7. Admission is based on the above criteria, interviews, and reference letters.

**Graduate Doctor of Pharmacy**

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**Contact Information**

Faculty of Pharmaceutical Sciences
2405 Wesbrook Mall
Vancouver, BC V6T 1Z3
Tel: 604.822.4645
Fax: 604.822.3035
Email: graduate.pharmd@ubc.ca
Web: Faculty of Pharmaceutical Sciences [http://www.pharmacy.ubc.ca/programs/degree-programs/PharmD](http://www.pharmacy.ubc.ca/programs/degree-programs/PharmD)
Academic Staff

Dean's Office

M. Coughtrie, Dean
T. Chang, Associate Dean, Research, Graduate and Postdoctoral Studies
S. Jarvis-Selinger, Associate Dean, Academic
L. Lynd, Associate Dean, Research
P. Zed, Associate Dean, Practice Innovation

Professors

H. Burt, B. Pharm. (Bath), Ph.D. (Br.Col.)
B. Cairns, B.Sc., B.Sc. (Pharm.), ACPR, Ph.D. (Br.Col.), Dr.Med. (Aalborg)
T. Chang, B.Sc. (Psych.), B.Sc. (Pharm.), Ph.D. (Br.Col.)
A. Collier, B.Sc.(Pcol), Ph.D. (Pcol) (Auck.)
M. Coughtrie, B.Sc., Ph.D. (Dund.)
U. Hafeli, B.Sc. (Pharm.) (F.I.T., SZ), Ph.D. (P.S.I., SZ)
U. Kumar, B.Sc., M.Sc. (Meerut), Ph.D. (Jodhpur)
F. Lalji, B.Sc. (Pharm.), Pharm.D. (Br.Col.)
S. Li, M.S. (Taiwan), Ph.D. (N.Carolina)
L. Lynd, B.S.P. (Sask.), Ph.D. (Br.Col.)
C. Nislow, B.A. (Flor.), Ph.D. (Boulder)
B. Rodrigues, B.Sc., M.Sc. (Karachi), M.Sc., Ph.D. (Br.Col.)
R. Sindelar, B.A. (Millikin), M.S., Ph.D. (Iowa)
P. Soja, B.Sc. (Southeastern, Mass.), M.Sc., Ph.D. (Br.Col.)
P. Zed, B.Sc. (Dal.), B.Sc. (Memorial), ACPR, Pharm.D. (Br.Col.)

Professors Emeriti

F. Abbott, B.S.P., M.S. (Sask.), Ph.D. (Purdue)
J. Axelson, B.S. (Wash.), Ph.D. (N.Y., Buffalo)
S. Bandiera, B.Sc. (Wat.), M.Sc. (Dal.), Ph.D. (Guelph)
G. Bellward, B.S.P., M.S.P., Ph.D. (Br.Col.)
J. Diamond, B.Sc., M.Sc. (Alta.), Ph.D. (Mich.)
M. Ensom, B.S., Pharm.D. (Kentucky), FASHP, FCCP, FCSHP
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