The Faculty of Pharmaceutical Sciences

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Pharmaceutical Sciences Website (http://www.pharmacy.ubc.ca)

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

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 (http://pharmsci.ubc.ca/sites/pharmsci.ubc.ca/files/Policy-on-Essential-Skills-for-Pharmacy-June-2015.pdf) 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) (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,213,397,0).

For the Flexible Doctor of Pharmacy, see Flexible Pharm.D. (http://www.calendar.ubc.ca/vancouver/index.cfm?tree=12,213,964,0)
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 604.827.0777 to arrange an appointment with an advisor.

**Entry-to-Practice Doctor of Pharmacy > Admission**

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 credits of post-secondary coursework within 10 years of the intake session's start date; and
- Meet a minimum overall average of 65% calculated on the last 30 credits of coursework and a minimum core average of 65% calculated on all attempts at the first-year biology, chemistry, math, and English prerequisites, or their equivalents, listed below. All prerequisite courses must have been completed within the last 10 years at an approved college or university.

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 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 are:

- **Cell Biology**: BIOL 112 or MICB 201, plus BIOL 121 and BIOL 140
- **Organic Chemistry**: CHEM 111 & 113 or CHEM 121 & 123
- **English**: 1st year (6 credits)\(^2\), ENGL 112 is recommended.
- **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:

- **Biology**: BIOL 200 and BIOL 201 or BIOC 202
- **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.
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 first-year English). 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 will be accepted in lieu of 3 credits of first-year English.
3 Most courses offered by the Faculty of Arts at any year level. ENGL courses used to satisfy the 6-credits of first-year English requirement cannot count towards satisfying the Humanities or Social Sciences requirement.

Applicants without these specific UBC courses need to present a full year (i.e., two 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

Also required:
- 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:
- Personal Profile
- Interview for selected applicants

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

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 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. Prior to November 1st, or prior to the start of any clinical rotations 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 clinical setting.

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 have a current written prescription for antiviral medication. 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 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.

**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).

Students who, because of illness or other personal issues, are absent from an end of block, comprehensive, or final examination must request Academic Concession (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,48,0,0#255) 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 90% of the standard timetable 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://www.pharmsci.ubc.ca/current-students/entry-practice-pharmd-students) 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://www.pharmsci.ubc.ca/current-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 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.

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<th>Professional Year 1 (PY1)</th>
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<td>PHRM 100</td>
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<td>PHRM 111</td>
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<td>PHRM 272&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>PHRM 361</td>
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<td>PHRM 371&lt;sup&gt;1&lt;/sup&gt;</td>
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<td>Electives&lt;sup&gt;2&lt;/sup&gt;</td>
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<th>Professional Year 4 (PY4)</th>
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<td>PHRM 441</td>
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<td>PHRM 473</td>
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<td>PHRM 481</td>
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<td><strong>Total Credits</strong></td>
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**Total Credits for the Program**
166

<sup>1</sup> Completed in the summer after the prior academic term.
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. Courses taken prior to entry to the program will not be credited toward elective requirements.

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 [http://www.pharmsci.ubc.ca/current-students/entry-practice-pharmd-students] list for more information) and participate in extra-curricular interprofessional activities.

Flexible Doctor of Pharmacy

Flexible Doctor of Pharmacy > Introduction

The Flexible Doctor of Pharmacy is for individuals who have completed a baccalaureate degree in pharmacy. It 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.

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 of Pharmaceutical Sciences

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. 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](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 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.

- **Additional Requirements:**
  - Supplemental Application:
    - Proof of registration as a pharmacist in BC or eligibility for licensure 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 experiential rotation, 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 experiential rotations.

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
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 have a current written prescription for antiviral medication. 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.

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) 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) 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. Challenge examination or Abbreviated Portfolio Assessment for selected courses only are the options available for didactic courses. Abbreviated or full portfolio assessments are the two options to challenge for credit for APPE, which are also called “rotations” (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/flex-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).

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.

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<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
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<td>PHRM 450</td>
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<td>PHRM 451</td>
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<td>PHRM 452</td>
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<td>PHRM 453</td>
<td>3</td>
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<td>PHRM 454</td>
<td>2</td>
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Clinical Clerkships and Additional Expenses

Required clinical clerkships sites 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. All program clerkships 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). 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.

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.
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) to assess their ability to meet the required technical standards for admission to and successful completion of the program.

Last updated: May 3, 2018

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.

Last updated: May 3, 2018

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).

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).

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**

Beginning in September 2015, the Bachelor of Science in Pharmacy (B.Sc.(Pharm.)) will be phased out year by year as the new Entry-to-Practice Doctor of Pharmacy (Pharm.D.) program is 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.

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.

**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>
<tr>
<th>First Year</th>
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</thead>
<tbody>
<tr>
<td>CAPS 390</td>
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<tr>
<td>CAPS 391</td>
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<tr>
<td>CHEM 233</td>
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<td>CHEM 235</td>
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<tr>
<td>MICB 202</td>
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<td>PHAR 201</td>
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### Second Year

<table>
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<tr>
<th>Course</th>
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<tbody>
<tr>
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<tr>
<td>PHAR 220</td>
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<tr>
<td>PHAR 241</td>
<td>1</td>
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<tr>
<td>PHAR 299</td>
<td>6</td>
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<tr>
<td>CAPS 301</td>
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<tr>
<td>STAT 203</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>39</strong></td>
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### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>PHAR 303</td>
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<tr>
<td>PHAR 315</td>
<td>4</td>
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<tr>
<td>PHAR 321</td>
<td>3</td>
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<tr>
<td>PHAR 323</td>
<td>3</td>
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<tr>
<td>PHAR 330</td>
<td>1</td>
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<tr>
<td>PHAR 341</td>
<td>2</td>
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<tr>
<td>PHAR 342</td>
<td>2</td>
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<tr>
<td>PHAR 351</td>
<td>2</td>
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<tr>
<td>PHAR 352</td>
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<tr>
<td>PHAR 361</td>
<td>1</td>
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<tr>
<td>PHAR 362</td>
<td>1</td>
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<tr>
<td>PHAR 369</td>
<td>3</td>
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<tr>
<td>PHAR 371</td>
<td>1</td>
</tr>
<tr>
<td>PHAR 399</td>
<td>6</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Credits</strong></td>
<td><strong>44</strong></td>
</tr>
</tbody>
</table>

1. PHAR 369 includes 6 credits from third year.
2. PHAR 469 includes 3 credits from third year.
3. Elective includes 3 credits from third year.
Electives\textsuperscript{3} & 6 \\
Total Credits & 45 \\

\begin{center}
\begin{tabular}{l|c}
\hline
\textbf{Fourth Year} & \\
\hline
PHAR 400 & 3 \\
PHAR 403 & 1 \\
PHAR 479 & 12 \\
PHAR 489\textsuperscript{4} & 6 \\
PHAR 499 & 5 \\
Electives\textsuperscript{3} & 9 \\
Total Credits & 36 \\
\hline
\end{tabular}
\end{center}

\textsuperscript{1} Taken in the summer after completing second year.  
\textsuperscript{2} Taken in the summer after completing third year.  
\textsuperscript{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. 
\textsuperscript{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](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/](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/](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](http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,42,910,0#18786)).

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This document was generated on 1 Aug 2018 at 10:46 AM.
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.
5. 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 residents in the Faculty and are assessed the applicable program fee as indicated in Fees, Financial Assistance, and Scholarships (Calendar page: http://www.calendar.ubc.ca/vancouver/index.cfm?tree=14,265,0,0#10329). The residencies are offered by the following agencies/authorities: Children's and Women's Health Centre of BC, 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

Application forms 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, practicing 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 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 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.

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: drug discovery, drug delivery and transport, drug metabolism, pharmacokinetics and toxicology, pharmacogenomics and pharmacogenetics, drug actions and disease processes, neuropharmacology, 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. Practicing 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

<table>
<thead>
<tr>
<th>First Year</th>
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<tbody>
<tr>
<td>PATH 415</td>
<td>2</td>
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<tr>
<td>PATH 548</td>
<td>6</td>
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<tr>
<td>PHAR 501</td>
<td>12</td>
</tr>
<tr>
<td>PHAR 502</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 506</td>
<td>6</td>
</tr>
<tr>
<td>PHAR 508</td>
<td>4</td>
</tr>
<tr>
<td>PHAR 554</td>
<td>3</td>
</tr>
</tbody>
</table>
PHAR 570  
Second Year  
PHAR 533  12
PHAR 534  12
PHAR 535  2
Comprehensive Graduate Pharm.D. Examination  
Total Credits  65

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)

College of Pharmacists of BC

The possession of a B.Sc. (Pharm.) or Pharm.D. does not in itself confer the right to practice pharmacy in any province of Canada. In order to practice pharmacy in BC, it is necessary to be registered as a pharmacist with the College of Pharmacists of BC.

All applicants for registration as pharmacists with the College of Pharmacists of BC are required to be registrants of the Pharmacy Examining Board of Canada.

Details of registration procedures and English language proficiency requirements may be obtained from the Registrar of the College of Pharmacists of BC (http://www.bcpharmacists.org).

Pharmacy Examining Board of Canada

The Board provides for examinations and issues certificates to successful candidates that may be filed with a Canadian provincial licensing body in connection with an application for license to practice pharmacy under the laws of that province. Information relative to the dates of examinations, application forms, etc., may be obtained from the Registrar, Pharmacy Examining Board of Canada (http://www.pebc.ca).

Academic Staff

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
J. Chatterton, Director, Student Services
G. MacDonald, Director, Flex PharmD Program
M. Pearson, Director, PT, B.Sc. (Pharm) Program
K. Wilbur, Executive Director, Entry-to-Practice Education
J. Yeung, Director, Experiential Education

Professors

S. Bandiera, B.Sc. (Wat.), M.Sc. (Dal.), Ph.D. (Guelph)
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.)
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.)
L. Lynd, B.S.P. (Sask.), Ph.D. (Br.Col.)
K. Macleod, B.Sc. (McG.), Ph.D. (Alta.)
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. Axelsson, B.S. (Wash.), Ph.D. (N.Y., Buffalo)
G. Bellward, B.Sc., 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
D. Fielding, B.Sc. (Pharm.), M.Sc. (Dal.), Ed.D. (Br.Col.)
S. Katz, B.Sc., M.Sc., Ph.D. (McG.)
M. Levine, B.Sc. (McG.), B.Sc. (Pharm.) (Br.Col.), Ph.D. (McM.)
D. Lyster, B.Sc., M.Sc., Ph.D. (Alta.)
R. Reid, B.S.P. (Sask.), Ph.D. (Lond.)
K. Riggs, B.Sc. (Pharm.), M.Sc., Ph.D. (Br.Col.)
J. Sinclair, B.Sc. (Pharm.), Ph.D.

Professors of Teaching

S. Albon, B.Sc., M.Sc., Ph.D. (Br.Col.)
M. Pearson, B.Sc. (Pharm.), Ph.D. (Br.Col.)

Associate Professors

A. Collier, B.Sc.(Pcol), Ph.D. (Pcol) (Auck.)
A. Frankel, B.A. (Calif., S.Barbara), Ph.D. (Calif., L.A.)
G. Giaever, B.Sc. (Brown, R.I.), Ph.D. (Harv.)
S.-D. Li, B.S., M.S. (Taiwan), Ph.D. (N.Carolina)
P. Loewen, B.Sc. (Pharm.), Pharm.D. (Br.Col.)
C. Nislow, B.A. (Flor.), Ph.D. (Boulder)
K. Wilbur, B.Sc.(Pharm) (Dal.), Pharm.D. (Br.Col.), M.Sc.PH (Lond.)
H. Wong, B.Sc.(Pharm.), Ph.D. (Br.Col.)
J. Wong, B.Sc., M.Sc., Ph.D. (Tor.)

Associate Professor Emeritus
J. M. Orr, B.Sc. (Pharm.), M.Sc. (Alta.), Ph.D. (Calif., S.Fran.)

Assistant Professors
A. Conklin, B.Sc. (Tor.), M.Sc. (Edin.), M.P.H. (N.Y.), Ph.D. (Camb.)
M. DeVera, B.Sc., M.Sc., Ph.D. (Br.Col.)
M. Harrison, B.Sc. (Bradford), M.Sc.(Edin.), Ph.D. (Manc.)
C. Ross, B.Sc. (Br. Col.), M.Sc. (Newcastle UK), Ph.D. (McMaster)
M. Sadatsafavi, MD (Tehran), M.H.Sc., Ph.D. (Br.Col.)
K. Williams, B.Sc. (Abbotsford), Ph.D. (Guelph)

Assistant Professors (Partner)
A. Barry, B.Sc. (Pharm.), Pharm.D. (Br.Col.)
K. Dahri, B.Sc. (Pharm.), Pharm.D. (Br.Col.)
R. Pammett, B.S.P., M.Sc. (Sask.)

Assistant Professors, Part-Time
R. Carr, B.Sc. (McG.), B.Sc. (Pharm.), Pharm.D. (Br.Col.)
J. Soon, B.Sc.(Pharm.), M.Sc., Ph.D. (Br.Col.)

Affiliate Professors
C. Marra, B.Sc. (Pharm.), Pharm.D., Ph.D. (Br.Col.)

Clinical Associate Professor
A. Low, B.Sc.(Pharm.), Pharm.D. (Br.Col.)

Senior Instructors
C. Brady, B.Sc. (W.Ont.), B.Sc. (Pharm.) (Alta.)
L. Eccott, B.Sc. (Vic.(BC)), M.Sc. (Br.Col.)
P. Gerber, B.Sc. (Pharm.), Pharm.D. (Br.Col.)
T. Kanji, B.Sc. (Pharm.) (Br.Col.)
P. Miller, B.Sc. (Pharm.) (Br.Col.), M.A. (Calif., S.Diego)
J. Moshenko, B.Sc. (Pharm.), M.Sc. (Pharm.), RPH, CEC
T. Nicholl, B.Sc. (Pharm.), M.Sc. (Br.Col.)
I. Price, B.Sc. (Okanagan), M.A., Ph.D. (Br.Col.)
K. Seto, B.Sc. (Pharm.), Pharm.D., ACPR, RPH
A. Verma, B.Sc., B.Sc. (Pharm.), M.Sc., Ph.D. (Br.Col.)

Instructors, Full-Time
T. Seet, B.Sc., B.Sc. (Br.Col.)

Instructors, Part-Time
H. Watson, B.Sc. (Pharm.) (Br.Col.)

Lecturers
F. Chan, B.Sc., B.Sc. (Pharm.), Pharm.D. (Br.Col.)
N. Dhaliwal, B.Sc., B.Sc.(Pharm.) (Br.Col.), Pharm.D. (Idaho)
K. Fang, B.Sc.Pharm (Br.Col.)
M. Fischer, B.Sc. (Pharm.) (Br.Col.)
B. Gobis, B.Sc. (Pharm.) (Br.Col.), ACPR, M.Sc. (W.Ont.)
J. Jawanda, B.Sc., R.Ph. (Br.Col.)
R. Khurana, B.Sc. (Tor.), B.Sc.(Pharm.) (Br.Col.), Pharm.D. (Tor.)
G. Lau, B.Sc.(Pharm.)
L. Leung, B.Sc. (Pharm.) (Br.Col.)
G. MacDonald, BSP, ACPR, Pharm.D., RPh
A. Meghani, B.Sc. (Pharm.) (Br.Col.)
J. Min, B.Sc. (Pharm.) (Br.Col.)
A. Mira, B.Sc.(Dietetics), B.Sc. (Pharm.) (Br.Col.)
G. Pachev, B.A. (Sofia), Ph.D. (Br.Col.)
H. Ragsdale, B.Sc.(Pharm.) (Br.Col.)
J. Reardon, B.Sc. (Pharm.) (Dal.), Pharm.D. (Br.Col.)
A. Taheri, B.Sc., B.Sc.(Pharm.) (Br.Col.)
P. Tchen, B.Sc., R.Ph., M.B.A. (Br.Col.)
J. Yeung, B.Sc.(Pharm.), Pharm.D. (Br.Col.)

Lecturers, Part-Time

V. Chauvin, B.Mus. (McG.), B.Sc. (Pharm) (Tor.), R.Ph. (Br.Col.)
A. Kim-Sing, B.Sc. (McM.), B.Sc. (Pharm.) (Br.Col.), Pharm.D. (S. Carolina Med.)
S. Peterson, B.Sc. (Agri.), B.Sc. (Pharm.) (Br.Col.)
J. Yuen, B.Sc.(Pharm.), R.Ph. (Br.Col.)

Adjunct Professors

M. Bally, B.Sc., M.Sc. (Texas A&M), Ph.D. (Br.Col.)
N. Dakers, B.Sc. (Guelph)
V. Fung, B.Sc.(Pharm.), M.Sc., M.D.(Br.Col.)
J. Gsponer (nee Bui), B.Sc., Ph.D. (Calif.)
A. Jayaraj, Ph.D. (Ill.)
R. Liggins, B.Sc. (Pharm.), Ph.D. (Br.Col.)
S. Louie, B.Sc. (Pharm.)
D. Marshall, B.Sc. (W. Ont.), MHSA (Alta.), Ph.D. (UNC)
R. Nakagawa, B.Sc. (Pharm.)
R. Procysyn, B.Sc. (Pharm.) (Man.), Ph.D., Pharm.D. (Br.Col.)
E. Wasan, B.Sc. (Pharm.) (Houston), Ph.D. (Case W.), Ph.D. (Br.Col.)
K. Wasan, B.Sc. (Pharm.), M.Sc. (P.Ceut.), Ph.D. (Texas)
D. Waterhouse, B.Sc., M.B.A. (S.Fraser), Ph.D. (Br.Col.)
M. Webb, B.Sc. (Br.Col.), M.Sc. (Tor.), Ph.D. (Br.Col.)
R. Wrishko, B.Sc., M.Sc. (Alta), Ph.D. (Br.Col.)
D. Yapp, B.Sc., Ph.D. (Br.Col.)

Associate Members

A. Anis, B.S.S. (Dhaka), M.A., Ph.D. (Car.)
N. Bansback, B.Sc., M.Sc., Ph.D. (Sheff.)
F. Benard, Ph.D. (Sher.)
M. Cox, B.Sc., M.Sc. (Auburn), Ph.D. (N.Carolina)
E. Guns, Ph.D., The Prostate Centre, VGH
J. Hill, B.M.L.Sc., M.Sc., Ph.D. (Br.Col.)
J. Kizhakkedathu, B.Sc., M.Sc., (Mahatma Gandhi), Ph.D. (Indian Inst.)
S. Ng, B.Sc., M.Sc. (Br.Col.), Ph.D. (Tor.)
C. E. R. Orvig, B.Sc. (McG.), Ph.D. (MIT)

Clinical Assistant Professors

For a complete listing of our Clinical Faculty, please see the http://pharmsci.ubc.ca/.

Clinical Instructors
For a complete listing of our Clinical Faculty, please see the [http://pharmsci.ubc.ca/](http://pharmsci.ubc.ca/).

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Clinical staff in Pharmacy Departments of numerous health care agencies provide teaching services to the Faculty. For a complete listing of these Pharmacy Departments and their clinical preceptors see the [http://pharmsci.ubc.ca/](http://pharmsci.ubc.ca/).

**Affiliated Community Pharmacies**

Pharmacy staff at numerous community pharmacy sites provide teaching services to the Faculty. For a complete listing of these pharmacies and their clinical preceptors see the [http://pharmsci.ubc.ca/](http://pharmsci.ubc.ca/).