

Pharmacy 407P Practice Experience III Manual

Spring-Summer 2025

Pharmacy Practice Experience Program Staff

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Acknowledgment

The Pharmacy Practice Experience (PPE) program is an integral component of the course of study leading to the Doctor of Pharmacy degree at Memorial University of Newfoundland.

We appreciate the support of all the dedicated pharmacists who volunteer their time and share their knowledge and experiences by serving as preceptors in the program.

It is acknowledged that while each student has a primary preceptor, they learn valuable information and skills from others at the site (e.g., other pharmacists and health professionals, pharmacy technicians, assistants) and we are grateful for your contribution.

Thank you!

Our program materials continue to develop and evolve. We thank preceptors and students for their constructive feedback and invite you to continue to offer your comments and suggestions for improvement.

We hope that participation in the practice experience program is rewarding and enjoyable for all.

PPE Checklist

This checklist should be referred to at the beginning and during the PPE by the student and preceptor in order to ensure that the necessary items are covered. Check as the task is completed.

| Before Starting the PPE | (V) |
|--|-----|
| Student is registered as a Pharmacy Student with the appropriate provincial licensing body | |
| Student has provided preceptor with letter of introduction | |
| First Day | |
| Student is introduced to pharmacy staff members, with a discussion of their roles | |
| Student is given a tour of the pharmacy which includes location of important areas, including: | |
| • Medication storage, and equipment and supplies, as applicable | |
| Pharmacy reference materials/resources | |
| Washroom/Lunch room/Coat storage | |
| Preceptor discusses with student policies and procedures for: | |
| • Attire/Dress code | |
| • Daily schedule, including breaks, lunch, etc. | |
| Telephone answering procedures | |
| • Security within the pharmacy | |
| • Confidentiality | |
| • Internet access | |
| • Any other pertinent topics | |
| Student and preceptor review goals for the PPE & discuss plans for meeting learning objectives | |
| During PPE | |
| Preceptor provides regular, ongoing feedback to student | |
| Student completes Student's Self-Assessment by end of Week 2 | |
| Preceptor completes <i>Preceptor's Evaluation of Student (Midpoint)</i> by end of Week 2; student and preceptor discuss student's performance at midpoint and review plan for meeting learning objectives | |
| Student submits required work to preceptor for review (e.g., DI responses, written reflection) | |
| End of PPE | |
| Preceptor reviews student's written reflection | |
| Student completes/submits required documentation Required Submissions Student's Self-Assessment Student's Evaluation of the Preceptor & Site Student's Evaluation of the PPE Program | |

Preceptor completes/submits required documentation

- Preceptor's Evaluation of the Student, including Attendance Certification
- Preceptor's Evaluation of the PPE Program

Student and preceptor discuss student's goals/priorities for future development

Introduction

Educational Outcomes

The Association of the Faculties of Pharmacy in Canada (AFPC) sets the standards for pharmacy education. The goal is to graduate **Professionals** whose core role is to serve as **Care Providers** who use their medication therapy expertise to benefit patients, communities, and populations through the integration of **Communicator, Collaborator, Leader-Manager, Scholar** and **Health Advocate** roles. (See Figure 1.) The AFPC Educational Outcomes have been adopted by the School of Pharmacy and guide the curriculum and experiential learning in the program.



Figure 1. Conceptual framework for AFPC Educational Outcomes

The full document outlining the AFPC Educational Outcomes is available at <u>http://afpc.info/system/files/public/AFPC-</u> Educational%20Outcomes%202017_final%20Jun2017.pdf

Professional Competencies¹

The National Association of Pharmacy Regulatory Authorities (NAPRA) document, *Professional Competencies for Pharmacists and Pharmacy Technicians at Entry to Practice in Canada*, outlines entry-to-practice requirements for pharmacy professionals in Canada. The foundation for all competencies is provided through the knowledge, skills and attitudes gained during the completion of the pharmacy degree program. Logically, the NAPRA competencies and the AFPC Educational Outcomes for pharmacy graduates are closely aligned, as summarized below.

| Professional Competency (NAPRA) | Educational Outcome (AFPC) |
|--|---|
| Pharmacy Professionals | Pharmacy Graduates |
| Provide safe and appropriate clinical carethat meets the patient's unique needs, goals,and preferences.Distribute quality products that are safe andappropriate for the patient. | <i>Provide patient-centered pharmacy care</i> by using their knowledge, skills and professional judgement to facilitate management of a patient's medication and overall health needs. |
| <i>Communicate and document effectively</i> to enable <i>partnership with the patient</i> and <i>collaboration with others</i> to promote optimal patient care. | <i>Communicate</i> effectively in lay and professional language, using strategies that take into account the situation, intended outcomes of the communication and diverse audiences. <i>Work collaboratively</i> with patients and intra- and inter-professional teams to provide safe, effective, efficient health care. |
| Provide <i>leadership, support, and supervision</i> to pharmacy colleagues. | Engage with others to <i>optimize the safety</i> , <i>effectiveness and efficiency of health care</i> and contribute to a vision of a high-quality health care system. |
| Preserve and support <i>community and population health</i> in Canada. | Demonstrate care for individual patients, communities and populations by using pharmacy expertise to <i>understand health needs and</i> <i>advance health and well-being of others</i> . |
| Engage in <i>continuous learning</i> and improvement to provide quality care based on the <i>best available evidence</i> and the application of <i>professional judgment</i> . | Take responsibility for excellence by <i>applying</i> <i>medication therapy expertise, learning</i> <i>continuously, creating new knowledge and</i> <i>disseminating knowledge</i> when teaching others. |
| Comply with legal, regulatory, and ethical requirements.Commit to a culture of patient safety and promote a culturally and emotionally safe work environment for themselves and others. | Deliver pharmacy care to patients, communities and society through <i>ethical practice and the high</i> <i>standards of behavior</i> that are expected of self- regulated professionals. |

¹ Competencies

A combination of professional knowledge, skills, abilities, attitudes, and judgments required for safe and competent performance by members of a profession (as defined in NAPRA document, *Professional Competencies for Pharmacists and Pharmacy Technicians at Entry to Practice in Canada*, October, 2024). https://www.napra.ca/wp-content/uploads/2024/10/NAPRA-Entry-to-practice-Competencies-October-2024-EN.pdf

Pharmacy Practice Experience III

The primary objective of the practice experience program is to learn from experience while under the supervision of a pharmacist preceptor.

Pharmacy Practice Experience (PPE) III consists of a 4-week placement (160 hours) after the **third** year of the entry-to-practice Pharm. D. program in a pharmacy setting where there is opportunity to participate in patient care activities.

During PPE III, students will continue to develop their patient care skills by working with a variety of patients and the healthcare team to appropriately identify, prevent, and resolve drug-therapy problems. Effective communication skills, professionalism, and teamwork are expected.

Courses completed to date in the academic program are listed in the Appendix.

Students and preceptors are referred to the <u>*PPE Program Handbook*</u> for information about the practice experience program structure, administration, and policies.

Using the PPE III Manual

The Pharmacy 407P manual is a little different from previous rotation manuals in our program in that it contains few *prescribed* questions or activities for the student to complete. Instead, it describes the learning outcomes for the student during PPE III and *suggested* activities through which those outcomes may be achieved. In addition to, and/or instead of, the suggested activities, the preceptor and student may have other ideas for useful activities to maximize the student's experience. Any *required* activities to be completed are clearly noted in the applicable section.

Students should indicate to their preceptors any areas in which they have had previous experience and any areas in which they may need particular help.

Students are expected to show initiative and self-direction in seeking and making use of opportunities to meet their learning goals. Students may find it helpful to review the learning objectives prior to starting the placement.

A written reflection illustrating their learning is required to be submitted by each student at the end of the practice experience. In their reflections, students will demonstrate how they have met the seven key roles of *Care Provider, Communicator, Collaborator, Leader-Manager, Health Advocate, Scholar, and Professional.* Students will describe some of the work/activities completed during their placement, as well as their interactions with others, providing evidence of achievement of the educational outcomes. It is recommended students keep a log or journal of activities completed during their PPE, <u>confidentially</u> documenting relevant notes.

The summary should be reviewed by the preceptor and will be assessed by the PPE Coordinators for completeness, quality of supporting evidence, and the student's ability to reflect upon the continuing development of their knowledge and skills during the practice experience.

Preceptor's Assessment of Student

The preceptor should **review**, for accuracy and completeness, the following activities completed by the student:

- 1) **Student self-assessments** (e.g., self-care recommendation, medication review, medication counselling) to facilitate the provision of **feedback**.
- 2) **Drug information responses** (<u>not</u> including the critical appraisal).
- 3) Written self-reflection with evidence of meeting the educational outcomes.

The preceptor will assess the student at the **midpoint** of the rotation (end of week 2) and at the **end** of the rotation (week 4) by completing the *Preceptor's Evaluation of Student* form.

The **midpoint** evaluation is a vital opportunity for communication between the preceptor and student and enables the student to consider and reflect on their progress.

Concerns or performance issues should be directed to the Practice Experience Coordinator as soon as they are identified (i.e., prior to the midpoint if recognized) so appropriate measures can be taken to help the student succeed.

Meeting Educational Outcomes

Described in the following tables are the educational outcomes for the rotation accompanied by proposed activities through which the objectives of PPE III may be met and students' abilities assessed.

The below activities **do not constitute an exhaustive list**. Students may complete an activity that is **not** in the table(s) and relate it to achievement of a learning outcome. A single activity may relate to the achievement of **more than one** competency/outcome. Not all suggested activities are required to be completed.

Tools and resources including self-assessment forms (e.g., for medication reviews, patient counseling, self-care recommendations, etc.), a drug information response form, and other relevant material are available in the students' Brightspace.

1. Care Provider Role

The core of the discipline of Pharmacy is **care provider**. Pharmacists use their knowledge, skills, and professional judgement in the management of a patient's medication and overall health needs.

| | Outcomes/Competencies |
|-------------------------|--|
| | The student is expected to: |
| CP1 | • Practise within the pharmacist scope of practice and expertise. |
| CP2.1 | • Collect and interpret relevant, necessary information about a patient's health-related care needs. |
| CP2.2 | • Formulate assessments of actual and potential health-related issues including the identification and prioritization of drug therapy problems. |
| CP2.3 (CL) | • Assess treatment strategies and make recommendations to prevent, improve, or resolve issues in collaboration with the patient and other health team members, as appropriate. |
| CP2.4 | • Participate in the implementation of care plans by taking part in compounding and/or dispensing; making a referral; adapting, initiating, continuing, discontinuing or administering medication as authorized; and/or by engaging the patient/care-giver through education. |
| ~~~ ~ | Complete proper documentation. |
| CP2.5 | • Follow-up by monitoring and evaluating progress toward achievement of the patient's goals of therapy, and adjusting plans, if needed. |
| СР3 | • Contribute to the continuous quality improvement of health care by adopting strategies that promote patient safety. |
| Suggested Activities | i) Patient interview and assessment, including conducting medication reviews; information gathering from other sources (e.g., chart/profile, electronic health record, laboratory data, consultation with caregivers and other health professionals) ii) Participation in deprescribing activities iii) Management of medication-related needs (e.g., dispensing medication, prescribing medication^a, self-care recommendation, administering medication^a); development of patient care plans; patient education, including device teaching iv) Medication reconciliation v) Participation in call-back programs, including medication adherence consultations |

Outcomes/Competencies

Suggested Activity: Where feasible, participate in deprescribing activities.

An important component of the **assessment of the appropriate use of medications** involves reducing, stopping, or changing medications that may be causing harm or are no longer necessary. **Deprescribing** is a planned and supervised process that involves a coordinated effort between patients, caregivers, and healthcare professionals.

Previously, Memorial's School of Pharmacy partnered with the <u>Canadian Deprescribing</u> <u>Network</u> and the Government of Newfoundland & Labrador to create and implement "SaferMedsNL". This initiative served to promote the appropriate use of medications, with a focus on two classes of drugs: **Proton Pump Inhibitors and Sedative-Hypnotics**. The SaferMedsNL public awareness campaign and research study has since concluded and the <u>SaferMedsNL website</u> and the resources are no longer being updated and maintained.

<u>Resources for pharmacists, deprescribing algorithms</u>, and other <u>useful tools</u> are available through the <u>Canadian Medication Appropriateness and Deprescribing Network</u>. The algorithms, along with additional resources and education materials for healthcare providers are also available on the website <u>deprescribing.org</u>.

1.1 a. Students should review and become familiar with the available deprescribing resources.

b. Where possible, and **under the direct supervision of a pharmacist, participate in the deprescribing of a proton pump inhibitor or a benzodiazepine/z-drug.** This may involve identification of a patient, medication profile review, assessment for appropriateness of deprescribing, initiating a conversation with a patient about deprescribing, providing an educational brochure to a patient, making a deprescribing recommendation, or completion of a "Pharmaceutical Opinion" to communicate with a prescriber.

2. Communicator Role

Pharmacists are effective **communicators** in both lay and professional language. They use a variety of strategies that take into account the situation, intended outcomes of the communication and diverse audiences.

| | Outcomes/Competencies |
|------------|--|
| | The student is expected to: |
| CM1.1, 1.5 | • Demonstrate effective oral, non-verbal, or written communication skills using |
| | techniques suitable for the intended outcomes of the communication. |
| CM1.2 | • Provide timely, clear responses that are tailored to the context and audience. |
| CM1.3 | • Express facts, evidence, and opinions accurately and effectively. |
| CM1.4 | • Listen, solicit, and respond appropriately to ideas, opinions, and feedback from others. |
| СМ1.6 | • Seek and synthesize relevant information from others in a manner that ensures common understanding. |
| CM1.7 | • Document and share information in a manner that optimizes patient safety, confidentiality and privacy. |
| СМ2.1 | • Engage in respectful, empathetic, non-judgmental, culturally safe, tactful conversations with others. |
| СМ2.2 | • Demonstrate awareness of the impact of one's own experience level, professional culture, and hierarchy within the health team on effective working relationships and adapt appropriately to the situation. |
| Suggested | i) Communication with patients/caregivers (e.g., gathering information, patient |
| Activities | interview, provision of patient education) |
| | ii) Interaction with preceptor, intra-and inter-professional team members, including responding to drug information requests |
| | iii) Delivery of reports or presentations (e.g., written notes or verbal summaries, educational sessions to a group) |
| | iv) Documentation of patient care activities (e.g., prescription and non-prescription consultations; documentation of prescribing, including interim supply, extensions, adaptations, etc.) |

3. Collaborator Role

Pharmacists work **collaboratively** with patients, intra- and inter-professional teams to provide safe, effective, efficient health care.

| Outcomes/Competencies | |
|-------------------------|--|
| | The student is expected to: |
| CL1.1 | • Establish positive professional relationships, including with patients , pharmacy colleagues, and individuals from other professions. |
| CL1.2 | • Recognize and respect the roles and shared/overlapping responsibilities of all team members and other health providers. |
| Suggested Activities | i) Effective collaboration with patients ii) Effective collaboration with pharmacy colleagues iii) Making expertise available to others by providing drug information iv) Attendance and participation in educational rounds or sessions v) Liaising with other health professionals as patient needs dictate, including in the facilitation of patient transitions from settings of care or providers of care |

4. Leader-Manager Role

As *leaders* and *managers*, pharmacists engage with others to optimize the safety, effectiveness, and efficiency of care, contributing to a vision of a high-quality health care system.

| | Outcomes/Competencies |
|---|--|
| | The student is expected to: |
| LM1.1, 1.4 | • Employ strategies and techniques to optimize pharmacy care, including the use of health informatics. |
| LM3 | • Demonstrate leadership abilities consistent with personal experience. |
| LM4 | • Set priorities and manage time to balance patient care, workflow, and practice requirements. |
| LM4.2 | • Use effective strategies to manage and improve their own practice of pharmacy. |
| Suggested | i) Participation in accurate, safe drug product distribution |
| Activities | ii) Utilization of automation or technology (e.g., HealtheNL) to support safe medication |
| | use |
| | iii) Demonstration of adherence to policies and procedures of the practice setting, in |
| | particular those designed to protect the safety of patients and pharmacy personnel, |
| | including, Standards of Practice for Continuous Quality Improvement and Medication |
| | Incident Reporting (CPNL) |
| | iv) Disclosure/reporting of a medication incident or near-miss event; engagement in |
| | determining contributing factors for medication incidents and performing incident |
| analyses according to the pharmacy's policies and procedures (e.g., Medication Safety | |
| | through Error Prevention (MedSTEP NL)) |
| | v) Completion of an adverse drug reaction report |
| | vi) Demonstration of organizational skills, ability to appropriately establish priorities |
| | and manage workload |
| | vii) Setting of educational and professional goals |
| | |

5. Health Advocate Role

Pharmacists are **health advocates** in demonstrating care for individuals, communities and populations by using pharmacy expertise to understand health needs and advance health and well-being of others.

| | Outcomes/Competencies | |
|------------|--|--|
| | The student is expected to: | |
| HA1 | • Respond to individual patient's health needs by advocating with the patient in the patient care environment. | |
| HA1.3, 2.2 | • Promote health by incorporating information on disease prevention and health promotion into interactions with individual patients or by participating in health promotion initiatives and programs aimed at disease prevention | |
| Suggested | i) Participation in a public health campaign or health screening clinic | |
| Activities | ii) Advocating for a patient by speaking on their behalf | |
| | iii) Sourcing appropriate information or resources to assist people in improving healthiv) Linking patients to an agency or resource to further address health needs | |

6. Scholar Role

Pharmacists are **scholars** who take responsibility for excellence by applying medication therapy expertise, continuously learning, creating new knowledge, and disseminating knowledge when teaching others.

| | Outcomes/Competencies |
|------------|---|
| | The student is expected to: |
| SC1 | Demonstrate understanding of core knowledge covered to date. |
| SC1.1 | • Use a combination of knowledge, critical thinking, and problem-solving skills to make decisions in practice (as appropriate to the role of a student pharmacist) and arrive at appropriate recommendations. |
| SC2.2 | • Respond to questions and provide drug information, using a systematic approach to search for information. |
| SC2.3, 2.4 | • Critically appraise health-related research and literature and incorporate the best available evidence into practice. |
| SC4 | • Participate in knowledge exchange; provide effective education to others, including patients , pharmacy colleagues, and individuals from other professions, as required. |
| Suggested | i) Provision of drug information in response to requests and based on identified needs, |
| Activities | including educating patients about medications |
| | ii) Making evidence-based recommendations |
| | iii) Creation of patient education materials/pamphlets |
| | iv) Designing an educational activity or providing an in-service |
| | v) Participation in research activities, where applicable (e.g., May Measurement Month) |

Required Activity: Provide drug information & critically appraise the literature

- 6.1 a. Respond to a minimum of two (2) drug information questions during the PPE. Select questions that are somewhat complex and which encourage an evaluation of clinical literature. Document your responses using the *Student Drug Information Request Documentation Form*. Ask your preceptor to provide feedback and initial the form. References must be cited appropriately. Refer to MUN Libraries, Guidelines for Citing Resources, http://guides.library.mun.ca/c.php?g=501741&p=3434605.
 - **b.** Submit one (1) response from (a) to the School via Brightspace along with critical appraisals of at least two (2) studies used in your response. Assess each study by answering the three overarching critical appraisal questions (*Are the results valid? What are the results? How can I apply the results to patient care?*), employing an appropriate critical appraisal tool based on the study design (e.g. JAMA, CASP, etc.). Point form responses are acceptable.

7. Professional Role

Pharmacists are **Professionals**. They are responsible and accountable for delivering pharmacy care to patients, communities, and society through ethical practice and high standards of behavior, as expected of self-regulated professionals.

| | Outcomes/Competencies |
|------------|--|
| | The student is expected to: |
| PR1.1 | • Exhibit professional behavior, which includes but is not limited to: |
| | • treating others with courtesy and respect. |
| | • being accessible, diligent, timely, and reliable in service to others. |
| | maintaining privacy and confidentiality. |
| | maintaining a professional image and demeanor, including maintaining composure in difficult situations. |
| | • maintaining appropriate professional boundaries with patients and coworkers. |
| PR1 | • Adhere to high ethical standards in the delivery of pharmacy care, ensuring primary accountability to the patient. |
| PR2.1 | • Take responsibility and accountability for actions and decisions. |
| PR2.3, 2.4 | • Practice within legal requirements by applying federal, provincial legislation, policies, by-laws, and standards. |
| PR3 | • Demonstrate awareness of own knowledge and abilities; show commitment to meeting learning needs in the management of continuing personal and professional development. |
| Suggested | i) Participation in day-to-day activities which includes: fulfilling responsibilities to |
| Activities | patients and colleagues; honoring the laws and regulations that govern the profession of pharmacy; maintaining professional composure |
| | ii) Recognizing or responding to situations presenting ethical dilemmas |
| | iii) Conducting self-assessment |
| | iv) Undertaking learning activities to address limitations in competence and/or performance, as required |

Summary of Required Submissions

The following items must be submitted to the School:

 Written Reflection: Must be submitted in Brightspace no later than 2 days after the end of PPE III. It must be clearly and concisely written and show reflection on the student's part, covering each of the seven domains (*Care Provider, Communicator, Collaborator, Leader-Manager, Health Advocate, Scholar, and Professional*). It should be between 1500 and 2000 words length (approximately 3-4 pages single-spaced).

The following points should be considered to help guide the writing of the summary:

- Activities you completed to meet the stated learning objectives
- The connection between a particular activity and the AFPC role(s)
- Specific outcomes or key competencies learned
- Personal attributes (knowledge, skills, motivations) that influence self-development and professional performance
- Clear, <u>specific</u> goals for future
- 2. <u>Critical Appraisal of Literature</u>: A *Drug Information Response Form* and critical appraisal of the literature, including tool used, must be submitted in Brightspace by the last day of the rotation.

Evaluation

Pharmacy Practice Experience III is an academic course and must be successfully completed in order to enter the next year of pharmacy study and to graduate from the School of Pharmacy.

Overall evaluation of the PPE will result in a grade of **Pass or Fail**. The final grade will be determined by the **PPE Evaluation Committee** of the School of Pharmacy.

A passing grade for PPE III is contingent upon:

- Ability of the student to **meet the required competencies**, as assessed by the **preceptor** using the evaluation tools supplied by the School.
 - The competency of **professionalism**, in addition to being assessed by the preceptor using the *Preceptor's Evaluation of Student* form, includes professional behavior as demonstrated by adherence to:
 - School of Pharmacy's Code of Professional Conduct for Pharmacy Students, Professional Suitability Regulations, Pledge of Professionalism, Professional Attire Guidelines, and Student Guidelines and Best Practices when Communicating Online
 - Memorial's Student Code of Conduct
 - *Standards, Guidelines and Policies governing the Practice of Pharmacy* (i.e. as established by the provincial regulatory body)
 - adherence to relevant site policies.
- Satisfactory **completion of activities and questions**, as determined by preceptor's evaluation and/or submission of assignments and reflections to the preceptor and/or School.
- Satisfactory **attendance** record.

Students who conduct themselves in such a manner as to **cause their termination** from the PPE site will be assigned a grade of **Fail** for the rotation.

Appendix: Courses Completed

- Courses Completed to DateCourses Remaining to be Completed in the Program

Courses Completed to Date

Course descriptions may be viewed at: <u>https://www.mun.ca/regoff/calendar/sectionNo=PHAR-0462</u>

| Term | Required Courses |
|---------------------------|---|
| Pre-Pharmacy | Courses required for admission |
| Pharmacy Year 1 | |
| Fall | CHEM 2400 Introductory Organic Chemistry I |
| Year 1 | PHAR 2002 Anatomy and Physiology I |
| | PHAR 2201 Pharmaceutics I |
| | PHAR 2250 Pharmacy Practice I |
| | PHAR 2610 Health Systems |
| Winter | CHEM 2401 Introductory Organic Chemistry II |
| Year 1 | PHAR 2003 Anatomy and Physiology II |
| | PHAR 2004 Introduction to Biochemistry |
| | PHAR 2202 Pharmaceutics II |
| | PHAR 2251 Pharmacy Practice II |
| | PHAR 2620 Social and Ethical Behaviour |
| Fall or Winter | PHAR 2010 Service Learning |
| Year 1 | |
| Pharmacy Year 2 | |
| Fall | PHAR 3111 General Biochemistry |
| Year 2 | PHAR 3250 Pharmacy Practice III |
| | PHAR 3270 Pharmacotherapy I |
| | PHAR 3801 Pathophysiology I |
| | PHAR 3805 Pharmacology I |
| Winter | PHAR 3006 Immunology |
| Year 2 | PHAR 3251 Pharmacy Practice IV |
| | PHAR 3271 Pharmacotherapy II |
| | PHAR 3410 Leadership and Health Promotion |
| | PHAR 3810 Microbiology of Infectious Diseases |
| | PHAR 3825 Medicinal Chemistry |
| Spring | PHAR 305P (PPE I): Community Pharmacy (6 weeks) |
| Year 2 Pharmacy Year 3 | |
| Fall | PHAR 4250 Pharmacy Practice V |
| Year 3 | PHAR 4250 Pharmacotherapy III |
| real S | PHAR 4621 Applied Health Research I |
| | PHAR 4802 Pathophysiology II |
| | PHAR 4802 Pathophysiology II PHAR 4810 Pharmacology II |
| | PHAR 4860 Pharmacogenomics and Biotechnology |
| Winter | PHAR 4251 Pharmacy Practice VI |
| Year 3 | PHAR 4251 Pharmacotherapy IV |
| | PHAR 4420 Pharmacy Management I |
| | PHAR 4622 Applied Health Research II |
| | PHAR 4820 Pharmacokinetics |
| Spring | PHAR 406P (PPE II): Hospital Dispensary (2 weeks) |
| Year 3 (Current) | PHAR 400P (PPE III): Pharmacy Direct Care (4 weeks) |
| | FIRM 407F (FFL III). Flidilliacy Direct Care (4 WEEKS) |

| Pharmacy Year 4 | |
|--|---|
| Fall | PHAR 5250 Pharmacy Practice VII |
| Year 4 | PHAR 5270 Pharmacotherapy V |
| | PHAR 5275 Symposium in Pharmacy |
| | PHAR 5815 Pharmacology III |
| | PHAR 5830 Applied Pharmacokinetics |
| Winter | PHAR 5251 Pharmacy Practice VIII |
| Year 4 | PHAR 5271 Advanced Pharmacotherapy |
| | PHAR 5430 Pharmacy Management II |
| | PHAR 5640 Social Justice and the Pharmacist |
| Year 5 | |
| Advanced Pharmacy Practice Experience | PHAR 605P APPE: Direct Patient Care (8 weeks) |
| (APPE) courses begin in May following | PHAR 606P APPE: Acute Care Hospital (8 weeks) |
| Year 4 Winter Semester, and continue | PHAR 607P APPE: Community Pharmacy (8 weeks) |
| through to April of the following year | PHAR 608P APPE: Elective (8 weeks) |

Courses Remaining to be Completed in the Program

https://www.mun.ca/pharmacy/programs/pharmd/pharmdprogramofstudy.php