New Course Outline

- The **PharmD Approval Process for New Course Outlines** document provides for more information on next steps and approval timelines.
- The **Course Outline Submission Overview** document provides more detailed guidelines on course learning objectives, topic outlines/scheduling requirements, and assessment methods.
- The **AFPC Educational Outcomes for Professional Programs** document provides complete information on roles and key competencies for Pharmacy Degree Programs.

**Course Number:** PHM352H1/ PHM552H1

**Course Title:** Pharmacotherapy in Older Adults

**Outline Version Code:**

Course Description: Growth in the proportion of the population over age 65 is expected to place significant demands on the health care system. Pharmacists must be prepared to manage the pharmacotherapy of older patients in order to achieve optimal individual and health system outcomes. This 26-hour selective course will prepare students for their future roles in geriatric practice through the development of specific competencies in the knowledge and application of pharmaceutical care for older adults. This course will cover demographics, biology and pathophysiology of aging, socioeconomics, ethical issues, and beliefs and barriers regarding health care and medication use in older individuals. Communication issues, unique needs of caring for seniors, and barriers to medication taking will also be addressed. Specific pharmacotherapy of conditions prevalent in the elderly, including movement disorders, dementia, urinary incontinence, and specific drug-induced illnesses and adverse events will be covered. This course will rely on both didactic and case-based discussions to demonstrate and enable students to develop skills integral to patient assessment and optimizing drug therapy in the older adult with complicated diseases and medication history.

**Semester:** ☒ Winter

**Course Type:** ☒ Selective
1. Course Learning Objectives:
Upon completion of this course, students will have achieved the following level of learning objectives:
Introductory = knowledge and comprehension of concepts, definitions
Intermediate = application of concepts to simple situations
Advanced = application of concepts to more complex situations with ability to synthesize and evaluate

Knowledge
Introductory Level:

- Describe cultural aspects of aging, such as preferences, values and needs of the geriatric patient.
- Describe major primary and secondary disease prevention strategies:
  1. Primary Prevention - related to osteoporosis, cardiovascular disease such as stroke, and will address risk factors and relevant targets for lipids, DM, HTN, AF.
  2. Secondary Prevention - related to acute delirium, constipation, functional decline, cardiovascular disease.
- Describe key issues that arise in the care of the hospitalized elderly.
- Describe various philosophies of palliative care, and the appropriateness of maintenance medications and use of symptom control strategies for common symptoms and their assessment.

Intermediate Level:

- Describe the physiologic changes of aging (renal and hepatic function, body composition, CNS function) and how they impact medication therapy in terms of pharmacokinetics (absorption, distribution, metabolism, and elimination) and pharmacodynamics (medication effects) of drugs.
- Describe the pathophysiology of common geriatric syndromes and diseases more commonly seen in the elderly.
- Identify and manage the social or economic issues of medication use for individual patient's therapy.

Advanced Level:

- Select appropriate parameters to assess effectiveness and safety when monitoring therapy for selected therapeutic areas.
- Justify your choices from among the therapeutic options considered for simulated patients (paper cases).
- Apply knowledge of age-related pharmacotherapy, as well as appropriate disease-specific assessment instruments, to select, evaluate and monitor medications for older adults

Skills
Introductory Level:

- Use the patient care process demonstrated in previous courses to design a plan for follow-up evaluation for a selected therapeutic regimen including physiological and biochemistry parameters.
Intermediate Level:

Assessment:
- Obtain and evaluate past and current medical and medication history and relevant physical assessment information from an elderly patient;
- Choose, administer, and interpret a validated and reliable tool/instrument appropriate for the elderly to assess: cognition, mood, physical function, nutrition, pain, and other screening assessments; Appropriately recommend and interpret laboratory results for an elderly patient;
- Distinguish between clinical presentation and management strategies for delirium, dementia and depression.

Plan care:
- Determine realistic therapeutic goals incorporating patient specific factors (quality of life, age, functionality, preference);
- Evaluate standards of practice/treatment guidelines for appropriateness in geriatric population;
- Determine therapeutic options and risks/benefits to the patient (e.g. no treatment, non-pharmacological management, pharmacological intervention, complementary/alternative medicine);
- Apply principles of pharmacokinetic and pharmacodynamic changes associated with aging, or renal or liver function to the design of pharmacotherapy regimen;
- Design and recommend age/patient specific regimen including medication, dose, dosage form, dosing interval, route of administration and duration of therapy as part of patient care plan.

Follow up and evaluate outcomes:
- Develop patient specific plan for follow-up evaluation for elderly patients;
- Recommend revisions to therapeutic plans based on changes in patient status.

Document
- Demonstrate the ability to document interventions or recommendations for other health care providers.

Communication:
- Identify barriers to communication (such as hearing and or sight impairments, speech difficulties, limited health literacy and cognitive disorders) and demonstrate ability to communicate your plan;
- Retrieve, analyze and interpret appropriate literature to provide drug information to older people.

Advanced Level:
- Medication management: Identify medications, including anticholinergic, psychoactive, anticoagulant, analgesic, hypoglycemic, cardiovascular drugs that should be avoided or used with caution in the elderly and explain the potential problems associated with each
- Describe the criteria for assessing appropriateness of medications in the elderly (i.e. Beer’s criteria and the START/STOPP criteria)
- Demonstrate an ability to manage chronic medication therapies by reviewing patient’s medications (prescription, over-the-counter, vitamins/supplements, etc.) to assess for appropriate indication, effectiveness, safety, and adherence.
Attitudes/Values:
Introductory Level:

- The student will undertake assessment and care plan development activities in a manner respecting patient autonomy and the individual therapeutic goals.
- The student will use interprofessional patient centered care principles to reach decisions for therapeutic alternatives.

Intermediate Level:

- Define the purpose and components of an interdisciplinary, comprehensive geriatric assessment and the roles individual disciplines play in conducting and interpreting a comprehensive geriatric assessment.
- Explain the spectrum of health care services available for older adults (home care, caregivers, long-term care facilities, assisting living facilities, etc.).
- Describe and advocate health care initiatives relative to wellness and health promotion (e.g., diet, medication adherence, immunizations, exercise, health screenings).

Advanced Level:

- Demonstrate an awareness of myths and age stereotypes (no ageist attitudes).
- Demonstrate an ability to view each older person as an individual, appreciating the diversity/heterogeneity in the elderly.
- Describe the importance of having compassion and understanding of the problems of older people and caregivers.
- Appreciate the need to improve physical, social, and cognitive function in older adults, rather than just focusing on diseases.

2. Rationale for Inclusion in the Curriculum:

The geriatrics selective will prepare students for direct patient care by exposing them to specific knowledge, skills and attitudes necessary for the provision of optimal pharmaceutical care to the elderly. Information acquired in this course will be applied further during the Advanced Pharmacy Practice Experiences, particularly when dealing with the geriatric population. In this course, students will be required to integrate knowledge learned in previous and concurrent courses including anatomy, physiology, pathobiology and pathophysiology, pharmaceutics, pharmacology, pharmacokinetics, the patient care process, informatics and clinical trials from the mandatory pharmacotherapy courses, and incorporate new pharmacotherapeutic information in order to identify, resolve and prevent drug therapy problems in simulated patient cases.

Through pre-class preparation, group discussion and in-class discussions, students will acquire and reinforce their knowledge of therapeutics; skills in assessing patient’s medical conditions and appropriateness of medications in order to identify, resolve and prevent drug therapy problems; and attitudes and values that increase sensitivity to a range of issues related to the use of medications faced by the elderly.
Therapeutic areas covered in this course include familiarity and utilization of laboratory values for diagnosing and managing various conditions, assessment and management of adverse drug reactions and drug allergies, principles of drug therapy in the elderly, common geriatric syndromes and diseases occurring more commonly in the elderly.

3. Pre-requisites:

PHM101H1; PHM143H1; PHM144H1; PHM145H1; PHM146H1; PHM202H1; PHM203H1; PHM204H1; PHM205H1; PHM301H1; PHM302H1

4. Co-requisites:

N/A

5. Course Contact Hours and Teaching Methodologies:

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<th>Didactic (lecture)</th>
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<td>Laboratory or Simulation</td>
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<td>Tutorial/Seminar/Workshop/Small Group (group size: )</td>
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<td>Other (please specify):</td>
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<td>Total Course Contact Hours</td>
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6. Estimate and description of student's weekly out-of-class preparation time excluding exam preparation:

Students will be expected to spend 2 to 4 hours per week working up the case, responding to the pre-class questions (if applicable) and completing care plan documentation requirements.

In preparation for class, students will be expected to read any assigned readings, research assessment tools, and work up the cases that are given in advance of the class session. Students will be expected to have reviewed any relevant materials from pre- or co-requisite courses.

There will be one individual assignment which will require up to 5 hours of out of class preparation.

This course is taught in a large class format (up to 240 students). It is essential that students attend class and are prepared to discuss the cases. Class attendance and participation will enable the student to succeed in this course. Out of class preparation is essential in order to be able to participate in the in-class discussions.

7. Topics Covered and Lecture Specific Learning Objectives

Week 1
Lecture Topic: Introduction to Geriatrics and Geriatric Assessment – Part I
Lecture Learning Objectives:

**Introduction**

- Describe why pharmacists must be prepared to manage pharmacotherapy of older patients.
- List and explain how physiological, pharmacokinetic and pharmacodynamic changes in the elderly can impact medication effectiveness and adverse effects in the elderly.
- Describe how various components of the course will prepare students to manage medication related issues in the elderly

**Geriatric Assessment- Part I:**

- Describe the components of comprehensive geriatric assessment
- Describe the role of the health care team and specific role of the pharmacist in conducting and interpreting a comprehensive geriatric assessment
- Select and apply appropriate assessment tools based on the patient's co-morbidities and physical functioning.
- Describe the features of some common assessment tools clinically useful in the assessment of common conditions in older adults.
- Create an assessment plan for a geriatric patient case

**Week 2**

**Lecture Topic:** Palliative Care: Interprofessional Education (IPE) Case-based Learning

**Lecture Learning Objectives:**

- Define “palliative care” from the following perspectives: philosophy, care setting, health care field
- Develop an understanding of the skills required to explore and identify goals of care in partnership with patient/clients with advanced disease
- Gain insight into the appropriate uniprofessional and interprofessional team approaches to delivering care when, in the setting of advanced disease, a primary goal of care is often to achieve and maintain quality of life as defined by the patient/client/family
- Understand the role and contribution of each health care profession in addressing goals of care in partnership with patient/client/family
- Develop an appreciation of the impact interprofessional care has on both the patient/client/family experience and the team decision making processes

**Week 3**

**Lecture Topic:** Pain Management and Management of Opioid-related Adverse Effects; Falls & Fractures in the Elderly

**Lecture Learning Objectives:**

**Pain:**

- Describe the presentation of chronic pain in older adults and the challenges in assessing pain in older adults with or without cognitive impairment.
• List key elements of a comprehensive pain assessment and describe the advantages and disadvantages of pain medications when used for older adults.
• Develop a care plan for an older adult with pain and describe dosing and monitoring recommendations when initiating and titrating medications for older adults.

Falls & Fractures:
• Describe etiology, epidemiology and clinical presentation of falls in older adults
• List medications and non-medication risk factors associated with increased risk of falls
• Describe pharm and non-pharm interventions with care plan and follow up evaluation
• Apply evidence for preventing fractures
• Resolve pharmacotherapy related problems to fractures
• Develop care plan and follow up

Week 4
Lecture Topic: Common Genitourinary Conditions (Part I): Urinary Incontinence; Common Genitourinary Conditions (Part II): Benign Prostatic Hyperplasia (BPH) and Erectile Dysfunction (ED)

Lecture Learning Objectives:

Urinary Incontinence:
• Assess symptoms and determine the type of UI being experienced
• Identify age-related and transient factors contributing to UI
• Evaluate risks and evidence for drug therapy used to treat UI in older adults
• Recommend non-pharmacological and pharmacological therapy to treat UI in older adults
• Create a care plan/monitoring plan for older adult with UI

BPH/ED:
• Assess patients for drugs that may worsen urinary tract symptoms due to BPH
• Determine when treatment is indicated for lower urinary tract symptoms due to BPH and justify pharmacological treatment options
• Justify continued use of dual therapy with alpha blockers and 5-alpha reductase inhibitors
• Summarize the applicability of landmark trials MTOPS and CombAT to the older adult
• Create a care plan/monitoring plan for older adult with lower urinary tract symptoms due to BPH and ED

Week 5
Lecture Topic: Common Endocrine Conditions in the Elderly; Management of Cardiovascular Disease in the Elderly

Lecture Learning Objectives:

Endocrine:
• Describe the etiology and clinical presentation of Type 2 Diabetes and hypothyroidism in older adults
- Identify common drug therapy problems affecting older adults with diabetes and/or hypothyroidism and develop a care plan
- Describe the advantages and disadvantages of pharmacologic agents used in Type 2 Diabetes when used in older adults.
- Differentiate between symptoms of hypoglycemia in older adults and the general population
- Justify selection of glycemic targets for older adults and explain the limitations of the available evidence
- Assess when to initiate treatment for subclinical hypothyroidism
- Describe a treatment approach for initiating levothyroxine in older adults with hypothyroidism

HTN/Orthostatic hypotension:

- Describe pathophysiology of HTN in elderly and how this differs from younger patients
- Explain systolic HTN in terms of CV risk and treatment approach
- Identify appropriate goals of therapy/targets for elderly patients with HTN
- List and summarize landmark trials for HTN in elderly
- Define orthostatic hypotension, and describe clinical presentation, implications, risk factors and goals of therapy
- Develop care plan for older patient with HTN

Week 6
Lecture Topic: Alzheimer's and Other Dementias

Lecture Learning Objectives:

- Briefly describe the main features, and signs and symptoms of Alzheimers Disease, Vascular dementia, Lewy Body dementia, and Frontotemporal dementia
- Compare and contrast the three cholinesterase inhibitors and memantine by efficacy, pharmacokinetics, adverse effects, dosage form, and convenience
- Recommend pharmacological therapy for cognitive symptoms of Alzheimer's disease
- Describe the common symptoms and treatment options for Behavioural and Psychological Symptoms of Dementia
- Evaluate the risks of drug therapy for BPSD

Week 7
Lecture Topic: Geriatric Pearls from a Geriatrician's Perspective and Mid-Term Exam Review

Lecture Learning Objectives:

- To develop a focused evidence-based and holistic approach to the following common geriatric issues:
  - general principles of ageing
  - dementias and their management
  - fitness to drive
  - falls prevention
  - insomnia
  - weight loss
  - screening and prevention
  - polypharmacy and safer prescribing practices
Week 8
Lecture Topic: Delirium and Infectious Diseases in the Elderly (Atypical Presentations)

Lecture Learning Objectives:

Delirium:

- Define delirium and describe the clinical signs and symptoms.
- Understand the impact of delirium on hospitalized older adults.
- Identify predisposing and precipitating risk factors for delirium.
- Assess an older patient's medication regimen to determine the likelihood that delirium may be drug-related.
- Review the pharmacological and non-pharmacological approaches to preventing and managing delirium.

UTI:

- Describe signs and symptoms of UTI in elderly
- Explain risks and benefits of antimicrobial pharmacotherapy for UTI
- Describe the prevalence and appropriate management of asymptomatic bacteriuria in elderly

Week 9
Lecture Topic: Polypharmacy & the Optimization of Medications in the Elderly; Geriatric Assessment – Part II

Lecture Learning Objectives:

Polypharmacy:

- Provide two different definitions of poly-pharmacy
- Describe at least five reasons for medication non-adherence seen in the elderly and identify ways to minimize each.
- Identify medications, including anticholinergic, psychoactive, anticoagulant, analgesic, hypoglycemic, cardiovascular drugs that should be avoided or used with caution in the elderly and explain the potential problems associated with each.
- Define prescribing cascades and provide an example

Geriatric Assessment - part II

- Review a case and complete the CGA assessment template.
- Identify issues using the framework of Rockwood and the assessment tools described in required reading/first lecture

Week 10
Lecture Topic: Sleep Disorders and Psychiatric Issue Management in the Elderly

Lecture Learning Objectives:
Insomnia & Depression

- Describe changes in sleep pattern that occur with normal aging and the prevalence and impact of insomnia in older adults.
- List and describe drug-induced causes of insomnia.
- Describe non-pharmacological approaches in the management of insomnia.
- Compare and contrast pharmacological agents to treat insomnia.
- Recommend appropriate therapy for insomnia based on evidence in the elderly.
- Describe the prevalence and impact associated with late life depression and the risk factors.
- Describe drug-induced causes of depression in the elderly.
- Compare and contrast pharmacological agents used to treat depression.
- Recommend appropriate therapy for late life depression based on evidence in the elderly.

Week 11
Lecture Topic: Parkinson's Disease

Lecture Learning Objectives:

- Describe motor symptoms, non-motor symptoms, and pathophysiology of Parkinson's Disease.
- Compare the drug therapies used in Parkinson's Disease, how they are used, efficacy, and adverse effects.
- Recommend initial pharmacological therapy for the motor symptoms of Parkinson's Disease.
- Recognize symptoms of Levodopa-related motor complications and recommend management strategies.
- Recommend management strategies for non-motor symptoms of PD.

Week 12
Lecture Topic: End-of-life Issues in the Elderly and the Palliative Care Approach

Lecture Learning Objectives:

- Describe what a palliative approach to care looks like in the elderly population.
- Describe common symptoms and how to manage them at the end of life in the elderly.
- List 3 key take away messages from each case study.

Week 13
Lecture Topic: Deprescribing of Medications to Manage Polypharmacy; Final Exam Review

Lecture Learning Objectives:

Deprescribing Medications:

- Describe how the concept of ‘deprescribing’ contributes to management of polypharmacy in the elderly.
- Assist prescribers with deprescribing safely and monitoring impact on patients.
- Define de-prescribing and apply the principles of deprescribing to a medication with deprescribing guidelines like PPIs.
8. Assessment Methodologies Used:

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<th>Assessment</th>
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<th>Assessment Method Used</th>
<th>Percent of Course Grade</th>
<th>For Group Work: Individualized or same mark for all group members</th>
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*Expectation for pass grades for all Pharmacy courses is 60%*

9. Policy and procedure regarding late assignments/examinations/laboratories:

Students who fail to submit the assignment by the specified due date, and who have a valid petition filed with the Registrar’s office, will be eligible to submit the completed assignment, or an alternative assignment based on course requirements, with no academic penalty. For each calendar day's delay in submitting the assignment, 5% of the assignment mark will be deducted to a maximum of 35%. The assignment will not be accepted 7 calendar days past the due date.

10. Policy and procedure regarding missed assignments/examinations/laboratories:

Students who miss an examination and who have a valid petition filed with the Registrar's office will be eligible to complete a make-up examination. The format of this examination will be at the discretion of the course coordinator, and may include, for example, an oral examination.

The student will be provided with one opportunity to write a make-up exam.
11. AFPC Education Outcomes addressed (check all those that apply):
- Refer to **AFPC Educational Outcomes for Professional Programs** for further information about the role and key competencies.

As Care Providers, pharmacy graduates:

**CP1 – Practice within the pharmacist scope of practice and expertise**

- **☐ CP1.1** Apply knowledge from the foundational sciences to make decisions relevant to the contemporary and evolving scope of pharmacist practice;
- **☐ CP1.2** Integrate AFPC Communicator, Collaborator, Leader-Manager, Health Advocate, Scholar, and Professional roles in their practice of pharmacy;
- **☐ CP1.3** Recognize and respond to the complexity, uncertainty and ambiguity inherent in pharmacy practice;
- **☐ CP1.4** Explain the benefits, risks and rationale associated with pharmacist-provided care as an important step in obtaining and documenting consent to pharmacist care;
- **☐ CP1.5** Recognize and take appropriate action when signs, symptoms and risk factors that relate to medical or health problems that fall into the scope of practice of other health professionals are encountered.

**CP2 – Provide patient-centred care**

- **☐ CP2.1** Collect, interpret, and assess relevant, necessary information about a patient’s health-related care needs;
- **☐ CP2.2** Formulate assessments of actual and potential issues and in collaboration with the patient and other health team members as appropriate, prioritize issues to be addressed in a given patient encounter;
- **☐ CP2.3** Create and document plans in collaboration with the patient and other health team members as appropriate, and make recommendations to prevent, improve or resolve issues;
- **☐ CP2.4** Implement plans in collaboration with the patient and other health team members as appropriate, including:
  - CP2.4.1 obtaining consent
  - CP2.4.2 making a referral or consulting others
  - CP2.4.3 adapting, initiating, renewing/continuing, discontinuing or administering medication as authorized
  - CP2.4.4a dispensing and/or
  - CP2.4.4b compounding and/or
  - CP2.4.4c delegating/authorizing such tasks to others appropriately
  - CP2.4.5 engaging the patient or care-giver through education, empowerment and self-management, and
CP2.4.6 negotiating the role of pharmacy and non-pharmacy team members in continuity and transitions of care.

☑ CP2.5 Follow-up by monitoring, evaluating progress toward achievement of the patient's goals of therapy, adjusting plans in collaboration with the patient and health team members across the care continuum.

CP3 – Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety

☑ CP3.1 Recognize and respond to harm and potential harm from health care delivery, including patient safety incidents;

☑ CP3.2 Adopt strategies that promote patient safety and address human and system factors;

As Communicators, pharmacy graduates:

CM1 – Communicate in a responsible and responsive manner that encourages trust and confidence

☑ CM1.1 Select and use oral, non-verbal and written communication strategies (tools, techniques, technologies, etc.) effectively so that the patient's best interests are foremost;

☑ CM1.2 Provide timely, clear responses that are tailored to the context and audience;

☑ CM1.3 Express facts, evidence, opinions and positions accurately and effectively, with clarity and confidence;

☑ CM1.4 Listen, actively solicit and respond appropriately to ideas, opinions and feedback from others;

☑ CM1.5 Use language, pace, tone, and non-verbal communication that is suitable for:
   
a) the intended outcomes of the communication, and
   b) the complexity, ambiguity, urgency and/or difficulty of a situation, conversation or conflict

☑ CM1.6 Seek and synthesize relevant information from others in a manner that ensures common understanding and where applicable, clarifies and secures agreement and/or consent;

☑ CM1.7 Compose and share oral, written, and electronic information in a manner that optimizes patient safety, dignity, confidentiality, and privacy.

CM2 – Communicate in a manner that supports a team approach to health promotion and health care

☑ CM2.1 Engage in respectful, empathetic, compassionate, non-judgmental, culturally safe, tactful conversations with patients, communities, populations, and health team members;

☑ CM2.2 Demonstrate awareness of the impact of one's own experience level, professional culture, biases and power and hierarchy within the health team on effective working relationships,
communication and conflict resolution with health team members and adapt the approach to the situation appropriately;

☐ CM2.3 Demonstrate accuracy and appropriateness of communication as well as respect for the role of other health team members when disclosing information about harmful or potentially harmful situations;

☐ CM2.4 In word and in action, convey the importance of teamwork in patient-centred care, patient safety, health care quality improvement and health program delivery.

As Collaborators, pharmacy graduates:

CL1 – Work effectively with members of the health team including patients, pharmacy colleagues and individuals from other professions

☐ CL1.1 Establish and maintain positive relationships;

☐ CL1.2 Recognize, respect and negotiate the roles and shared/overlapping responsibilities of team members;

☐ CL1.3 Join with others in respectful, effective shared decision-making.

CL2 – Hand over the care of the patient to other pharmacy team members and non-pharmacy team members to facilitate continuity of safe patient care

☐ CL2.1 Determine when and how care should be handed over to another team member;

☐ CL2.2 Recognize, respect and honour the negotiate shared and overlapping responsibilities of patients, pharmacy team members and other health members when handovers occur;

☐ CL2.3 Demonstrate safe handover of care, using oral, written, and electronic communication, during a patient transition to a different care provider or setting.

As Leader-Managers, pharmacy graduates:

LM1 – Contribute to optimizing health care delivery and pharmacy services

☐ LM1.1 Work with others to apply quality improvement strategies and techniques to optimize pharmacy care;

☐ LM1.2 Contribute to a culture of patient safety;

☐ LM1.3 Confirm the quality, safety, and integrity of products;

☐ LM1.4 Use health informatics to improve the quality of care, manage resources and optimize patient safety.

LM2 – Contribute to the stewardship of resources in health care systems
LM2.1 Apply evidence and management processes to achieve cost appropriate care;
LM2.2 Allocate health care resources for optimal patient care;
LM2.3 Contribute to the management of finances and health human resources in pharmacy practice settings;

LM3 – Demonstrate leadership skills
LM3.1 Demonstrate leadership skills to enhance pharmacy practice and health care.

LM4 – Demonstrate management skills
LM4.1 Work with others to apply the principles of effective management and supervision of health human resources and medication use systems;
LM4.2 Use effective strategies to manage and improve their own practice of pharmacy.

As Health Advocates, pharmacy graduates:

HA1 – Respond to an individual patient’s health needs by advocating with the patient within and beyond the patient care environment
HA1.1 Work with patients to address determinants of health that affect them and their access to needed health services or resources;
HA1.2 Work with patients to increase opportunities to adopt healthy behaviours;
HA1.3 Incorporate disease prevention, health promotion and health surveillance into interactions with individual patients.

HA2 – Respond to needs of communities or populations they serve by advocating with them for system-level change in a socially accountable manner
HA2.1 Work with community or population to identify the determinants of health that affect them;
HA2.2 Participate in health promotion and disease prevention programs.

As Scholars, pharmacy graduates:

SC1 – Apply medication therapy expertise to optimize pharmacy care, pharmacy services and health care delivery
SC1.1 Use knowledge and problem-solving to arrive at recommendations and decisions that are appropriate, accurate, and practical;
SC1.2 Use professional experience to solve routine, previously encountered problems;
SC1.3 Use established decision-making frameworks and apply learning required to manage new situations and problems.

**SC2 – Integrate best available evidence into pharmacy practice**

SC2.1 Generate focused questions related to needs for information, recommendations and decisions in practice;
SC2.2 Use systematic approaches in the search for best available evidence;
SC2.3 Critically appraise health-related research and literature;
SC2.4 Incorporate best available evidence in the decision-making process.

**SC3 – Contribute to the creation of knowledge or practices in the field of pharmacy**

SC3.1 Apply scientific principles of research and scholarly inquiry;
SC3.2 Apply ethical principles that underlie research and scholarly inquiry.

**SC4 – Teach other pharmacy team members, the public and other health care professionals including students**

SC4.1 Provide effective education to others;
SC4.2 Employ appropriate teaching roles when teaching others;
SC4.3 Deliver effective feedback in teaching and learning situations;
SC4.4 Use appropriate learning assessment and evaluation strategies when working with patients, team members, students and teachers.

As **Professionals**, pharmacy graduates:

**PR1 – Committed to apply best practices and adhere to high ethical standards in the delivery of pharmacy care**

PR1.1 Exhibit professional behaviour whether face-to-face, in writing, or via technology-enabled communication. Professional; behaviour includes, but is not limited to:

a) demonstrating honesty, integrity, humility, commitment, altruism, compassion, respect for diversity and patient autonomy;
b) being accessible, diligent, timely and reliable in service to others;
c) abiding by the principle of non-abandonment;
d) maintaining appropriate interpersonal boundaries;
e) maintaining professional composure, demeanor, and language even in difficult situations, and;
PR1.2 Use ethical frameworks as one component of professional judgment;

PR1.3 Recognize and respond to situations presenting ethical dilemmas, including conflicts of interest;

PR1.4 Engage in activities that:
   a) protect the public, and;
   b) advance the practice of pharmacy.

PR2 – Able to recognize and respond to societal expectations of regulated health care professionals

PR2.1 Take responsibility and accountability for actions and inactions;

PR2.2 Demonstrate a commitment to patient safety and quality improvement;

PR2.3 Honour the laws, ethical codes, and regulatory requirements (by-laws, standards, policies) that govern the self-regulated profession of pharmacy;

PR2.4 Demonstrate an understanding of federal, provincial/territorial, and municipal laws, policies and standards that apply to pharmacy workplaces;

PR2.5 Demonstrate an ability to maintain competence to practice through evaluating areas for improvement and planning, undertaking learning activities to address limitations in competence and/or performance and incorporating learning into practice;

PR2.6 Identify and respond to unprofessional, unethical, and illegal behaviours in pharmacists, other pharmacy team members, and other health professionals.

PR3 – Committed to self-awareness in the management of personal and professional well being

PR3.1 Set professional and personal goals, priorities, and manage their time to balance patient care, workflow, and practice requirements;

PR3.2 Examine, reflect upon, and manage personal attributes (knowledge, skills, beliefs, biases, motivations, emotions, etc.) that could influence self-development and professional performance;

PR3.3 Adapt their practice of pharmacy to fulfill evolving professional roles;

PR3.4 Recognize and respond to self and colleagues in need.