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: PHM 383H

Course Title: Introduction to Antimicrobial Stewardship

Outline Version Code:

Course Description:

Antimicrobial Stewardship is an inter-disciplinary, multi-faceted approach to optimize antimicrobial use. While the ultimate goal of Antimicrobial Stewardship is to improve patient outcome, appropriate and effective use of antimicrobials is an important component to control antimicrobial resistance, minimize unintended consequences such as C. difficile infections, and to contain health care costs. As of 2013, presence of an active Antimicrobial Stewardship Program has been made a Required Operating Practice for acute care hospitals and long-term care facilities by Accreditation Canada. This course expands and deepens knowledge gained from the Year 2 Infectious Diseases Pharmacotherapy and Microbiology Courses, with an emphasis on clinical application within the antimicrobial stewardship context. It will introduce students to the principles of antimicrobial stewardship to facilitate rational selection of antimicrobial regimens; stewardship interventions; quality improvement methods; as well as program development, implementation and evaluation. The course culminates to a team proposal presentation for an antimicrobial stewardship based on a fictitious institution's profile. Each team is tasked with convincing a panel of judges, who in practice are antimicrobial stewardship clinicians or program executives, to support their proposed activities.

Semester: ☒ Fall ☐ Winter ☐ Summer

Course Type: ☒ Elective ☐ Selective ☐ Mandatory

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 the rationale of antimicrobial stewardship, including emerging multi-drug resistant pathogens; lack of new agents available from research and development; adverse events and collateral damage due to suboptimal antimicrobial use such as C. difficile infections; Describe the objectives of antimicrobial stewardship and its role in our healthcare system: to improve patient safety; clinical outcome; and maintaining cost-effectiveness of therapy; Describe the roles and functions of the core members of an ASP clinical team: A). Pharmacist: To encourage the optimal use of antimicrobial agents by promoting interdisciplinary collaboration within the hospital and auditing and guiding (feedback) the selection, dosing, timing, de-escalation, and discontinuation of antimicrobial therapy. Also involved in reporting consumption of antimicrobials (see also metrics objective #11), B). Physician: To educate prescribers and promote optimal use of antimicrobials, be involved in auditing and guiding (feedback) antimicrobial regimens selection, in the development and implementation of measures based on the best evidence; Identify the role of these clinical partnerships that are necessary for the success of an ASP; A). Microbiology lab, B). Infection Prevention and Control (IPAC), C). Infectious diseases specialist physicians and pharmacist, D). Public Health Departments; Identify how Information Technology is an essential component of ASP by facilitating: A). A steward’s day-to-day practice, B). ASP’s accountability towards stakeholders through reporting of antimicrobial consumption and costs; Describe the supporting infrastructure and administrative support required for a successful ASP; Identify, describe and critique different stewardship interventions that have been reported in the literature, including prospective audit and feedback; educational outreach; formulary restriction; clinical guidelines and pathways; de-escalation of therapy; dose optimization; parenteral to oral conversion; Identify innovative or creative interventions to conduct antimicrobial stewardship programs, including the use of clinical decision support, incorporation of biomarkers; and sharing of resources amongst small, community hospitals. Outline how change management strategies can be utilized to achieve organizational change and empower ASP; Metrics: A). Describe and calculate different metrics used in antimicrobial stewardship (days of therapy; defined daily dose; length of therapy) (Intermediate level), B). Select and present metrics in the way that it best suits a particular patient population (Introductory level), C). Analyze metrics in determining the direction of an ASP, such as in needs assessment, ongoing evaluation, maintenance or expansion of a program. (Introductory level); List and describe components of a report of accountability to stakeholders of an ASP. Compare and contrast different models of antimicrobial stewardship programs, depending on needs or resource limitations; Evaluate and select appropriate stewardship interventions based on resources, patient population and clinical setting (community/primary care vs. institutional); Describe the role of Accreditation Canada in ASP: A).Describe the role of Accreditation Canada for Canadian institutions: to improve quality of health care services through accreditation process, B). Define a Required Operating Practice (ROP): evidence-based practices that mitigate risk and contribute to improving the quality and safety of health services, C). List and interpret the ROP for ASP (as of 2013) for acute care hospitals and identify how each test of compliance may be operationalized: i). The organization implements an ASP, ii). The program includes lines of accountability for implementation, iii). The program is inter-disciplinary, iv). The program includes interventions to optimize antimicrobial use that may include audit and feedback (academic detailing); a formulary of targeted antimicrobials and approved indications; order forms; clinical guidelines/pathways; education; strategies to streamline or de-escalate therapy; dose optimization and IV-to-PO conversion where appropriate, v). The organization establishes mechanisms to evaluate the program on an ongoing basis, and shares results with stakeholders in the organization.

Intermediate Level:

Utilize ID and microbiology knowledge learned in Year 2 (PHM 203 Infectious Diseases, PHM 242 Microbiology of Infectious Disease) to recommend appropriate drug therapy for common infectious syndromes (bacteremia; upper and lower respiratory tract infections; skin and soft tissue infections; urinary tract infections; and intra-abdominal infections) in community or institutional healthcare settings (General Internal Medicine, General Surgery, Primary Care, Long Term Care); Apply principles of antimicrobial stewardship in conjunction with ID/microbiology knowledge for a given patient scenario with infectious syndromes listed above, and articulate the rationale for a specific
recommendation in the GIM /General Surgery and primary care/community patient population (intermediate level) and specialized patient populations (introductory level) such as paediatrics, long term care residents, and the critically ill; Recognize selection of “optimal” antimicrobial therapy requires relating knowledge of Infectious Diseases and Microbiology with antimicrobial pharmacology, dose, duration of therapy and patient characteristics (Intermediate level).

Advanced Level:

Skills
Introductory Level:

Communicate to the health care team recommendations and articulate the rationale as an antimicrobial steward in written and/or verbal format; Demonstrate communication skills through articulating the rationale of antimicrobial stewardship to the leadership team of an institution, or a community-based practice; Integrate metrics as part of the accountability reporting to stakeholders of the ASP, including leadership of patient care team, and executive sponsors; Create and defend a basic antimicrobial stewardship program to meet the needs of Accreditation Canada ROP for an institutional setting.

Intermediate Level:

Demonstrate ability to critically appraise literature that may provide guidance on: A). Specific clinical situation or infectious syndromes, B). Specific models or metrics about ASP; Demonstrate skills of knowledge translation in making stewardship recommendations, through critical appraisal of literature; Apply the Pharmacotherapy Workup in managing common infectious syndromes in specialized populations— paediatrics.

Advanced Level:

Apply the Pharmacotherapy Workup in managing common infectious syndromes in the general internal medicine and primary care populations (with whom students may be more familiar through ID PTC PHM 203H)

Attitudes/Values:
Introductory Level:

Intermediate Level:

Exemplify professional attitude, behaviour and willingness towards inter-professional collaboration/education; Exemplify respect and team work towards student peers; Realize that antimicrobial stewardship shares common goals and objectives in improving patient care and safety with the clinical teams, programs and consultants; Realize that antimicrobial stewardship does not intend to be policing the use of antimicrobials, but rather through knowledge
translation serves to optimize antimicrobial use at the patient level and in the health care system, and reducing societal costs incurred by infections from multi-drug resistant organisms and other collateral damage.

Advanced Level:

2. Rationale for Inclusion in the Curriculum:

Answering the call that antimicrobial stewardship should be required through regulatory process, Accreditation Canada made ASP an ROP for all acute care hospitals in 2013. ASP is integral part of quality health care for meeting the three criteria of the “Triple Aim of Healthcare” from the Institute of Healthcare Improvement: 1) improving the patient experience of care (including quality and satisfaction; 2) improving the health of populations; and 3) reducing the per capita cost of health care. ASP operates under the auspices of patient safety, such that drug (antimicrobial) therapy is selected in an evidence-informed and appropriate manner to minimize the risk of adverse events and collateral damage such as C. difficile infection. Its goal is to reduce the selection pressure of emergence of multi-drug resistant organisms, thereby preserving the efficacy of antimicrobials in an era of dwindling armamentarium of new antimicrobial agents. ASP may reduce overall drug cost, but more importantly, it decreases the associated costs of misuse of antimicrobials. As ASP expands from the institutional to the community level, pharmacists play an increasingly vital stewardship role in coordinating, measuring and advocating for the optimal use of antimicrobials, in addition to educating prescribers, other health care professionals and the public. This course lays the foundation for students to become future stewards as they take on responsibilities in medication therapy management.

3. Pre-requisites:

PHM 203H - Pharmacotherapy in Infectious Diseases;
PHM 242- Microbiology of Infectious Diseases - Immunology; IPE requirements – roles and knowledge of other health care professionals; inter-professional conflict resolution.

4. Co-requisites:

5. Course Contact Hours and Teaching Methodologies:

<table>
<thead>
<tr>
<th>Didactic (lecture)</th>
<th>Hours: 16</th>
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<tbody>
<tr>
<td>Large group problem-based/ case-based learning (group size: )</td>
<td>Hours:</td>
</tr>
<tr>
<td>Laboratory or Simulation</td>
<td>Hours:</td>
</tr>
<tr>
<td>Tutorial/Seminar/Workshop/Small Group (group size: 10 )</td>
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<tr>
<td>Experiential</td>
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<tr>
<td>On-line</td>
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<tr>
<td>Other (please specify):</td>
<td>Hours:</td>
</tr>
<tr>
<td><strong>Total Course Contact Hours</strong></td>
<td><strong>Hours: 26</strong></td>
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</table>
6. Estimate and description of student’s weekly out-of-class preparation time excluding exam preparation:

Preparation time is about 1-2 hours per week. Review assigned pre-readings. For the team proposal, students may be required to discuss with fellow group members as part of the preparation.

7. Topics Covered and Lecture Specific Learning Objectives

**Week 1**

**Lecture Topic:** Intro. to antimicrobial stewardship; Partnerships and collaboration; Toolkit of ASP in institutional setting and supporting evidence; Intro. to program development and project management

**Lecture Learning Objectives:**

Introduction to antimicrobial stewardship: Rationale, objectives and principles of antimicrobial stewardship; Role and membership of oversight committee and reporting infrastructure of ASP; Membership and role of Antimicrobial Advisory Committee; Membership and function of the ASP team

Partnerships and collaboration: Infectious Diseases Consultant; Microbiology; Information Technology

Toolkit of ASP in institutional setting and supporting evidence: Core (prospective audit & feedback; education) and supplemental strategies (formulary restriction; order forms; clinical pathways); Implementation (dose optimization; empiric vs. targeted therapy; de-escalation; IV-PO conversion; duration of therapy; single vs. double coverage; drug allergies); Day-to-day activities of ASP team

**Week 2**

**Lecture Topic:** Role of Public Health in Antimicrobial Stewardship; Research in Antimicrobial Stewardship

**Lecture Learning Objectives:**

Role of Public Health in Antimicrobial Stewardship: Understand the role of public health departments (local, regional, national) play in facilitating antimicrobial stewardship

Research in Antimicrobial Stewardship; Understand the limitations and potential of current research in antimicrobial stewardship; Understand how these limitations and potential impact the applicability of evidence in the recommendations by an antimicrobial steward.

**Week 3**

**Lecture Topic:** Antimicrobial Stewardship in the Long Term Care setting; Interprofessional collaboration and communication in antimicrobial stewardship

**Lecture Learning Objectives:**

Antimicrobial Stewardship in the Long Term Care setting; Understand the need for antimicrobial stewardship in long term care patients; Describe the interventions shown to be applicable in the long term care setting.
Interprofessional collaboration and communication in antimicrobial stewardship: Understand the components of an inter-disciplinary team in an ASP; Understand the skills necessary to collaborate in an interdisciplinary setting, including conflict management.

**Week 4**  
**Lecture Topic:** “Bread and butter” of Antimicrobial Stewardship

**Lecture Learning Objectives:**

“Bread and butter” of Antimicrobial Stewardship— application in commonly encountered infectious diseases syndromes and identify opportunities of stewardship in General Internal Medicine, General Surgery and Paediatrics. Stewardship principles to be applied in each case are stated emphasized by the facilitators.

*Order in which case studies are arranged depends on availability of facilitators, and is subject to change.

a) C. difficile infection and intra-abdominal infections

b) Surgical prophylaxis and antibiotic allergy assessment

**Week 5**  
**Lecture Topic:** “Bread and butter” of Antimicrobial Stewardship; Antimicrobial stewardship interventions in primary care

**Lecture Learning Objectives:**

“Bread and butter” of Antimicrobial Stewardship— application in commonly encountered infectious diseases syndromes and identify opportunities of stewardship in General Internal Medicine, General Surgery, Long Term Care and Paediatrics (continued)

a). Urinary tract infection (catheter associated UTI and asymptomatic bacteriuria)

Antimicrobial stewardship interventions in primary care

a). Describe the needs, challenges and opportunities of antimicrobial stewardship in the primary care setting

b). Apply select appropriate interventions for antimicrobial stewardship in primary care and describe appropriate performance measurements for this setting

**Week 6**  
**Lecture Topic:** “Bread and butter” of Antimicrobial Stewardship

**Lecture Learning Objectives:**

Application in commonly encountered infectious diseases syndromes and identify opportunities of stewardship in General Internal Medicine, General Surgery, Long Term Care and Paediatrics (continued)
a) Ventilator-associated pneumonia

b) Community-acquired pneumonia, including pneumonia in patient from long term care setting

**Week 7**

**Lecture Topic:** Bread and butter" of Antimicrobial Stewardship

**Lecture Learning Objectives:**

Application in commonly encountered infectious diseases syndromes and identify opportunities of stewardship in General Internal Medicine, General Surgery, Long Term Care and Paediatrics (continued)

a) skin soft tissue infection

b) antimicrobial stewardship interventions for infectious syndromes in paediatric population

**Week 8**

**Lecture Topic:** Quality improvement and program development

**Lecture Learning Objectives:**

Understand the needs for performance measurement in an antimicrobial stewardship program;

a) Describe the appropriate measurements of performance in an antimicrobial stewardship program

b) Understand the limitations of each performance measurement and their applicability

**Week 9**

**Lecture Topic:** Quality improvement and program development

**Lecture Learning Objectives:**

Application of quality improvement methodologies in the context of antimicrobial stewardship

**Week 10**

**Lecture Topic:** Quality improvement and program development

**Lecture Learning Objectives:**

Understand the components of what constitute a “program”; Understand the steps and thought process in project management; Apply the concept of project management in an intervention related to antimicrobial stewardship, including the use of a project charter.
Week 11
Lecture Topic: Diagnostic stewardship and antimicrobial stewardship

Lecture Learning Objectives:
Understand the integration between diagnostic technologies, clinical decision making and antimicrobial stewardship in an interdisciplinary setting.

Week 12
Lecture Topic: Design, implementation and evaluation of an ASP in an institution to meet Accreditation Canada’s ROP

Lecture Learning Objectives:
Design, implementation and evaluation of an ASP in an institution to meet Accreditation Canada’s ROP.

Team presentation
Implementation, evaluation and feedback to stakeholders

Week 13
Lecture Topic: Antimicrobial stewardship in specialized population (oncology) International efforts of antimicrobial stewardship; Exam Review

Lecture Learning Objectives:
Debrief of team presentation: Highlights and summary of team presentations

International efforts of antimicrobial stewardship
Understand the current global efforts of antimicrobial stewardship and how they influence the international community in tackling antimicrobial resistance.

8. Assessment Methodologies Used:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Course Learning Objectives Addressed</th>
<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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<tbody>
<tr>
<td>☒ Assignment</td>
<td>Application of antimicrobial stewardship principals and communication skills</td>
<td>Individual assignment. Assessed using a global assessment scale.</td>
<td>10%</td>
<td></td>
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<tr>
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<td>☐ Presentation</td>
<td>☐ Participation</td>
<td>☒ Mid-term</td>
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</tr>
</tbody>
</table>

**Expectation for pass grades for all Pharmacy courses is 60%**

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

Students who fail to submit an assignment by the specified due date will receive a deduction of 10% of overall grade (INSTRUCTOR TO SPECIFY) for each day beyond the due date (including/excluding weekends/holidays), to a maximum of 30%. Assignments will not be accepted for grading after 3 late days.

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

Missed Assignment Policy: Students who fail to submit an 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.

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

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;

f) maintaining privacy and confidentiality;

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.