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: PHM322H1

Course Title: Patient/Medication Safety

Outline Version Code:

Course Description:

This course will examine patient safety and the potential for medication incidents from two aspects: (1) the medication-use system (e.g. prescribing, order entry, dispensing, administration, and monitoring); and (2) patient care (e.g. preventable adverse drug events experienced by patients). It will build on topics previously covered in the curriculum, as well as additional materials from the Institute for Safe Medication Practices Canada (ISMP Canada), the Canadian Patient Safety Institute (CPSI), and the concept of continuous quality improvement in pharmacy practice. The CPSI Patient Safety Competency Domains will be applied to topics covered in this course.

Semester: ☒ Winter

Course Type: ☒ Elective

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:**

To apply the system approach and core error prevention principles in response to medication errors. To outline quality improvement opportunities that most significantly influence safe medication use. To identify key aspects of a standardized continuous quality improvement (CQI) program. To explain the relationship between medication safety and continuous quality improvement in pharmacy practice.

**Intermediate Level:**

To apply the system approach and core error prevention principles in response to medication errors. To outline quality improvement opportunities that most significantly influence safe medication use. To identify key aspects of a standardized continuous quality improvement (CQI) program. To explain the relationship between medication safety and continuous quality improvement in pharmacy practice.

**Advanced Level:**

**Skills**

**Introductory Level:**

To manage disclosure of medication incidents. To practice multi-incident analysis and root cause analysis. To integrate risk assessment strategies to prevent harm in patient care.

**Intermediate Level:**

**Advanced Level:**
**Attitudes/Values:**

**Introductory Level:**

To consider incident analysis as part of incident management and quality improvement of pharmacy practice. To reflect on the vulnerabilities in the medication-use system and risks of medication errors in pharmacy practice.

**Intermediate Level:**

**Advanced Level:**

2. **Rationale for Inclusion in the Curriculum:**

Patient safety is one of the five curricular themes. As pharmacy students practice patient-centred care and seek to create leadership roles in the Canadian health care system, they need to embrace a culture of medication safety where shared learning from non-punitive reporting of near misses and medication incidents can be achieved, and establish a practice environment where standardized continuous quality improvement is in place for consistent delivery of safe and effective patient care. This course will provide students with the opportunity to use the tools for medication-use system improvement that are previously covered in the curriculum.

3. **Pre-requisites:**

PHM110H1, PHM151H1, PHM205H1, PHM215H1, PHM251H1, PHM310H1

4. **Co-requisites:**

5. **Course Contact Hours and Teaching Methodologies:**

<table>
<thead>
<tr>
<th>Didactic (lecture)</th>
<th>Hours: 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large group problem-based/ case-based learning (group size: 50 max)</td>
<td>Hours:</td>
</tr>
<tr>
<td>Laboratory or Simulation</td>
<td>Hours:</td>
</tr>
<tr>
<td>Tutorial/Seminar/Workshop/Small Group (group size: )</td>
<td>Hours: 10</td>
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<tr>
<td>Experiential</td>
<td>Hours:</td>
</tr>
<tr>
<td>On-line</td>
<td>Hours:</td>
</tr>
<tr>
<td>Other (please specify): Presentations</td>
<td>Hours: 6</td>
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<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:

Approximately 1-2 hours of required reading or pre-class preparation work per week and 10 hours preparation time for student presentations and research paper.

7. Topics Covered and Lecture Specific Learning Objectives

Week 1
Lecture Topic: Course Introduction and Preventable Adverse Drug Events (Guest Lecturer)

Lecture Learning Objectives:

To understand the course learning objectives and student performance expectations. To identify preventable drug-drug interactions in pharmacy practice. To determine systems analysis of adverse drug events. To demonstrate how observational studies can offer evidence to support clinical outcomes of preventable adverse drug events.

Week 2
Lecture Topic: Disclosure and Reporting of Medication Incidents

Lecture Learning Objectives:

To describe the role of pharmacists in medication safety with respect to reporting of medication incidents and disclosure of medication incidents. To recognize the importance of reporting adverse reactions (e.g. side effects) of health products to the Canada Vigilance Program. To report medication incidents (e.g. near misses or medication errors) to the Institute for Safe Medication Practices Canada (ISMP Canada) Canadian Medication Incident Reporting and Prevention System (CMIRPS) Program. To reflect on near misses and medication incidents in training/placements.

Week 3
Lecture Topic: Teamwork and Communication in Patient/Medication Safety (Guest Lecturer)

Lecture Learning Objectives:

To appraise the importance of teamwork and collaboration among patients, pharmacists and other health care providers in embracing a non-punitive culture of patient/medication safety and patient-centred care. To record activities in pharmacy practice that contributes to patient/medication through a collaborative effort.

Week 4
Lecture Topic: Root Cause Analysis Workshop (Guest Lecturer) 3-Hour Class

Lecture Learning Objectives:

To describe the approach to a root cause analysis on critical incidents. To conduct a root cause analysis in a hands-on workshop.
Week 5  
Lecture Topic: Medication Safety Self-Assessment (Guest Lecturer)

Lecture Learning Objectives:

To assemble the relationship between medication safety and continuous quality improvement in pharmacy practice. To analyze Medication Safety Self-Assessment® (MSSA) in community pharmacy practice in a hands-on workshop. To realize quality improvement opportunities via the 10 key elements that most significantly influence safe medication use.

Week 6  
Lecture Topic: Proactive Risk Assessment in Pharmacy Practice Workshop (Guest Lecturer) – 3-Hour Class

Lecture Learning Objectives:

To identify risk assessment strategies in pharmacy practice. To conduct a proactive risk assessment in a hands-on workshop.

Week 7  
Lecture Topic: No Class – Reading Week

Lecture Learning Objectives:

N/A

Week 8  
Lecture Topic: Multi-Incident Analysis Workshop (Guest Lecturers)

Lecture Learning Objectives:

To describe the approach to multi-incident analysis. To conduct a multi-incident analysis on non-critical medication incidents in a hands-on workshop.

Week 9  
Lecture Topic: Continuous Quality Improvement in Community Pharmacy Practice

Lecture Learning Objectives:

To identify key aspects of the impact on medication safety as a result of a standardized CQI program. To consider the significance of a standardized CQI program in pharmacy practice for safe and effective patient.

Week 10  
Lecture Topic: Student Presentations – 3-Hour Class

Lecture Learning Objectives:

To report key findings from an analysis of a Medication Safety Self-Assessment of a community pharmacy. To demonstrate patient/medication safety key elements through oral and written communication. To realize and be
proactive in risk assessment and continuous quality improvement initiatives for advancement of medication safety in pharmacy practice.

**Week 11**  
**Lecture Topic:** Student Presentations – 3-Hour Class

**Lecture Learning Objectives:**

To report key findings from an analysis of a Medication Safety Self-Assessment of a community pharmacy. To demonstrate patient/medication safety key elements through oral and written communication. To realize and be proactive in risk assessment and continuous quality improvement initiatives for advancement of medication safety in pharmacy practice.

**Week 12**  
**Lecture Topic:** Continuous Quality Improvement in Hospital Pharmacy Practice (Guest Lecturers)

**Lecture Learning Objectives:**

To describe the significance of required organizational practices (ROPs) in patient safety and risk management in Canadian hospitals. To realize the ROPs in pharmacy practice for safe and effective patient care.

**Week 13**  
**Lecture Topic:** No Class

**Lecture Learning Objectives:**

N/A

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>
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<tr>
<td>☐ Presentation</td>
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<tr>
<td>☒ Participation</td>
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<tr>
<td>☑ Mid-term</td>
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<tr>
<td>☐ Final Exam</td>
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<tr>
<td>☐ Assignment</td>
<td>☐ Participation</td>
<td>Student Presentation</td>
<td>10%</td>
<td>Same grade for all group members</td>
</tr>
<tr>
<td>☑ Presentation</td>
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<tr>
<td>☐ Participation</td>
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<td>☐ Final Exam</td>
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Expectation for pass grades for all Pharmacy courses is 60%

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

For each calendar day of 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 fail to attend the group presentation by the specified date, and who have a valid petition filed with the Registrar's office will be eligible to deliver the group presentation on an alternative date at the discretion of the course coordinator, with no academic penalty.

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. For each calendar day of 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.

Students who miss the mid-term examination and who have a valid petition filed with the Registrar's office will have the weight of the missed mid-term examination added to the weight of the final examination. In the absence of a valid petition, a grade of zero will be assigned for the mid-term examination.

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

A student who is given permission to complete a make-up final examination must pay a Special Examination fee of $70. Failure to make arrangements for paying this fee by the deadline provided will result in the loss of privilege to complete the make-up final examination, and a grade of zero will be assigned for the final examination. The student will be provided with one opportunity to write a make-up final 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
  - CP2.4.4 dispensing and/or compounding and/or 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.