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# Pharmacy Technician Program Standard

*The approved program standard for  
Pharmacy Technician program of instruction  
leading to an Ontario College Diploma  
delivered by Ontario Colleges of Applied Arts  
and Technology (MTCU funding code 51623)*

Ministry of Training, Colleges and Universities  
September, 2009

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# I. Introduction

*This document is the Program Standard for the Pharmacy Technician program of instruction leading to an Ontario College Diploma delivered by Ontario colleges of applied arts and technology (MTCU funding code 51623).*

## Development of System-Wide Program Standards

In 1993, the Government of Ontario initiated program standards development with the objectives of bringing a greater degree of consistency to college programming offered across the province, broadening the focus of college programs to ensure graduates have the skills to be flexible and to continue to learn and adapt, and providing public accountability for the quality and relevance of college programs.

The Program Standards and Evaluation Unit of the Ministry of Training, Colleges and Universities has responsibility for the development, review and approval of system-wide standards for programs of instruction at Ontario colleges of applied arts and technology.

## Program Standards

Program standards apply to all similar programs of instruction offered by colleges across the province. Each program standard for a postsecondary program includes the following elements:

- **Vocational standard** (the vocationally specific learning outcomes which apply to the program of instruction in question);
- **Essential employability skills** (the essential employability skills learning outcomes which apply to all programs of instruction); and
- **General education requirement** (the requirement for general education in postsecondary programs of instruction).

Collectively, these elements outline the essential skills and knowledge that a student must reliably demonstrate in order to graduate from the program.

Individual colleges of applied arts and technology offering the program of instruction determine the specific program structure, delivery methods and other curriculum matters to be used in assisting students to achieve the outcomes articulated in the standard. Individual colleges also determine whether additional local learning outcomes will be required to reflect specific local needs and/or interests.

## The Expression of Program Standards as Vocational Learning Outcomes

Vocational learning outcomes represent culminating demonstrations of learning and achievement. They are not simply a listing of discrete skills, nor broad statements of knowledge and comprehension. In addition, vocational learning outcomes are interrelated and cannot be viewed in isolation of one another. As such, they should be viewed as a comprehensive whole. They describe performances that demonstrate that significant integrated learning by graduates of the program has been achieved and verified.

Expressing standards as vocational learning outcomes ensures consistency in the outcomes for program graduates, while leaving to the discretion of individual colleges curriculum matters such as the specific program structure and delivery methods.

## The Presentation of the Vocational Learning Outcomes

The **vocational learning outcome** statements set out the culminating demonstration of learning and achievement that the student must reliably demonstrate before graduation.

The **elements of the performance** for each outcome define and clarify the level and quality of performance necessary to meet the requirements of the vocational learning outcome. However, it is the performance of the vocational learning outcome itself on which students are evaluated. The elements of performance are indicators of the means by which the student may proceed to satisfactory performance of the vocational learning outcome. The elements of performance do not stand alone but rather in reference to the vocational learning outcome of which they form a part.

## The Development of a Program Standard

In establishing the standards development initiative, the Government determined that all postsecondary programs of instruction should include vocational skills coupled with a broader set of essential skills. This combination is considered critical to ensuring that college graduates have the skills required to be successful both upon graduation from the college program and throughout their working and personal lives.

A program standard is developed through a broad consultation process involving a range of stakeholders with a direct interest in the program area, including employers, professional associations, universities, secondary schools and program graduates working in the field, in addition to students, faculty and administrators at the colleges themselves. It represents a consensus of participating stakeholders on the essential learning that all program graduates should have achieved.

## Updating the Program Standard

The Ministry of Training, Colleges and Universities will undertake regular reviews of the vocational learning outcomes for this program to ensure that the Pharmacy Technician Program Standard remains appropriate and relevant to the needs of students and employers across the Province of Ontario. To confirm that this document is the most up-to-date release, contact the Ministry of Training, Colleges and Universities at the address or telephone number noted on the inside cover page.

## II. Vocational Standard

*All graduates of the Pharmacy Technician program of instruction must have achieved the eight vocational learning outcomes listed in the following pages, in addition to achieving the essential employability skills learning outcomes and meeting the general education requirement.*

### Preamble

At all times, learners in the Pharmacy Technician program will act in compliance with the pertinent legislation\* and established standards, policies and procedures in their roles and responsibilities within the scope of practice of the pharmacy technician\*. Graduates of the Pharmacy Technician program will have attained a solid basis in the theory, principles and practices needed to enter this patient\*-centred health care profession. They will apply critical thinking skills to process prescriptions\* accurately and safely, control inventory according to established policies and procedures, use paper and electronic processes to generate and maintain accurate and confidential records and third party payer documents, and assist in the provision of optimal medication therapy management\* and cost effective pharmacy services.

Being able to effectively communicate verbally, electronically and in writing is a key requirement of graduates. In addition, graduates will contribute to the operation of a pharmacy by performing work that requires high levels of accuracy and responsibility, including the legal and technical management of receiving prescriptions\*; transferring or copying prescriptions\*; product preparation; the independent double check\*; and the release and distribution of pharmaceutical products\* pursuant to a prescription\* drug order. As members of an interprofessional health care team, graduates will work with pharmacists\*, pharmacy technicians\*, pharmacy assistants and other health care providers\* in order to optimize the health and well-being of patients\*. Graduates will also use pharmacy informatics\* to enter patient\* and prescription\* information; access information, such as drug interchangeability; and respond to computer warnings pertaining to drug interactions, adverse effects and allergies by informing the pharmacist\* as required.

Graduates are awarded an Ontario College Diploma following the successful completion of the Pharmacy Technician program. Graduates of Pharmacy Technician programs accredited by the Canadian Council for Accreditation of Pharmacy Programs (CCAPP) are eligible for the Pharmacy Technician Qualifying Examinations for entry-to-practice of the Pharmacy Examining Board of Canada (PEBC). The PEBC Qualifying Examinations consist of a written Multiple Choice Question (MCQ) examination and a performance-based examination, called an Objective Structured Practical Examination (OSPE). After successful completion of the PEBC Qualifying Examinations, applicants must successfully complete the Ontario College of Pharmacists (OCP) Jurisprudence Examination before they can proceed with their application for registration with OCP.

Registration is necessary to qualify for employment as a pharmacy technician\* in the Province of Ontario.

In the Province of Ontario, pharmacy technicians\* have employment opportunities in practice settings\*, such as hospital pharmacies, community/retail pharmacies and long-term care facilities. In addition, they may find employment opportunities within other organizations and agencies that require the knowledge and expertise of a pharmacy technician\*, such as pharmaceutical companies and insurance companies.

\* *See glossary*

## **Synopsis of the Vocational Learning Outcomes Pharmacy Technician (Ontario College Diploma)**

*The graduate has reliably demonstrated the ability to*

- 1. practice safely within a legal, ethical and professional framework in practice settings\*.**
- 2. process prescriptions\* accurately in compliance with pertinent legislation\* and established standards, policies and procedures in practice settings\*.**
- 3. prepare pharmaceutical products\* for dispensing\* in compliance with pertinent legislation\* and established standards, policies and procedures in practice settings\*.**
- 4. release pharmaceutical products\* in compliance with pertinent legislation\* and established standards, policies and procedures in practice settings\*.**
- 5. collaborate with the pharmacist\* and other health care providers\* to optimize the patient's\* health and well-being within the scope of practice of the pharmacy technician\*.**
- 6. promote quality assurance by performing effective and efficient administrative functions in practice settings\*.**
- 7. optimize medication therapy management\* and product distribution using current technologies in practice settings\*.**
- 8. develop and implement effective strategies for ongoing personal and professional development that support currency, competence, ethics and values in the pharmacy sector.**

*\*See Glossary*

*Note:* The learning outcomes have been numbered as a point of reference; numbering does not imply prioritization, sequencing, nor weighting of significance.

## The Vocational Learning Outcomes

1. *The graduate has reliably demonstrated the ability to*  
**practice safely within a legal, ethical and professional framework in practice settings\*.**

### Elements of the Performance

- comply with current and applicable federal and provincial legislation\* and requirements in practice settings\*
- conduct oneself in compliance with the code of ethics for members of the Ontario College of Pharmacists (OCP)
- adhere to established communication policies, procedures and/or protocols in practice settings\* when interacting with patients\*, patients' agents\*, pharmacists\*, pharmacy technicians\*, pharmacy assistants and other health care providers\*
- perform duties within the scope of practice of the pharmacy technician\* in practice settings\*
- act responsibly and be accountable for one's own decisions and actions that affect the well-being and safety of patients\*, self and others
- refer requests for information that are outside the scope of practice of the pharmacy technician\*, such as clinical and/or therapeutic information, to the pharmacist\*
- protect the patient's\* rights to privacy and confidentiality, including the safe and secure transmittal, storage and disposal of all information, records and files
- maintain confidentiality of all workplace and corporate data and ensure safe and secure disposal in compliance with established policies and procedures in practice settings\*
- comply with health and safety standards and best practices in practice settings\*

2. *The graduate has reliably demonstrated the ability to*

**process prescriptions\* accurately in compliance with pertinent legislation\* and established standards, policies and procedures in practice settings\*.**

### **Elements of the Performance**

- receive a new or repeat prescription\* from patients\*, patients' agents\*, prescribers or health care providers\*, and others in the circle of care\* acting on the prescribers' behalf, in compliance with regulations, policies and procedures in practice settings\*
- verify the authenticity, accuracy and completeness of prescriptions\* by ascertaining that each prescription\* meets all legal requirements, using all necessary means of communication in securing authenticity, and consulting with the pharmacist\* where indicated by standards of practice
- verify and update a prescriber's information by utilizing current provincial databases
- collect, record and update the patient's\* profile, including but not limited to demographic information, medical history, pharmaceutical product\* usage and history, allergies, and third party information
- recognize changes in the patient's\* profile, health record, medical condition, drug or disease interactions, allergic reactions, warnings and/or prescription\* (e.g., changes in drug, dosage form, dosage, dose, quantity and/or directions), and notify the pharmacist\* as required
- assess and prioritize prescriptions\* according to patients'\* needs and in compliance with regulations, policies and procedures in practice settings\*
- transfer or copy a prescription\* ensuring the accuracy and completeness of documentation in compliance with current and applicable legislation\* and established policies and procedures in practice settings\*
- recognize the prescribing rights and limitations of the various regulated health care professionals\* by referring to current and applicable legislation\*
- inform patients\* about third party insurance plans, limits and payment requirements for both prescription\* and non-prescription products
- elicit and respond accurately and satisfactorily to patients'\* questions and concerns within the scope of practice of a pharmacy technician\*, using professional communication techniques
- direct questions by patients\*, patients' agents\* and health care providers\* that are outside the scope of practice of the pharmacy technician\* to the pharmacist\*
- utilize pharmaceutical, medical, laboratory, metric and apothecary terms, abbreviations and symbols when processing prescriptions\*
- interpret prescriptions\* by correctly identifying the brand or generic name, dosage form, dosage, dose, quantity and directions
- recognize drug distribution patterns that may be indicative of drug misuse or diversion and notify the pharmacist\* and/or manager in compliance with current and applicable legislation\* and established policies and procedures in practice settings\*

- apply current and applicable drug schedules, categories and legislation\* when processing prescriptions\*, including prescription\*, non-prescription, restricted access and natural health products
- categorize a drug according to its therapeutic classification, directions, adverse effects, drug or disease interactions, dosage forms, strengths and routes
- verify sufficient inventory of the medication and dosage form prior to processing the prescription\*, and identify and access alternate sources when necessary

3. *The graduate has reliably demonstrated the ability to*

**prepare pharmaceutical products\* for dispensing\* in compliance with pertinent legislation\* and established standards, policies and procedures in practice settings\*.**

### **Elements of the Performance**

- refer the therapeutic questions and issues of patients\*, patients' agents\* and health care providers\* to the pharmacist\* for intervention
- perform dispensing\* functions for prescription\*, non-prescription and restricted access drugs as well as natural health products in compliance with approved drug schedules and categories
- use established pharmaceutical systems of measurement to accurately calculate, convert, measure, verify and document the ingredients and quantities of pharmaceutical products\*
- comply with drug interchangeability regulations and policies, third party plans and all hospital formulary restrictions when selecting the pharmaceutical product\*
- receive, store and process narcotic and controlled drugs/preparations in compliance with current and applicable legislation\* and established standards, policies and procedures in practice settings\*
- develop and apply strategies that minimize or prevent the human and environmental factors that contribute to medication incidents and discrepancies
- use appropriate personal protective equipment in compliance with health and safety standards, policies and procedures in practice settings\*
- perform accurate calculations when retrieving, counting, pouring, weighing or measuring pharmaceutical products\*
- prepare sterile and non-sterile products by applying proper techniques in compliance with established policies and procedures in practice settings\*
- ensure the accuracy and quality of the pharmaceutical product\* against the prescription\* and formula in collaboration with the pharmacist\* or designated personnel (e.g., pharmacy technician\*)
- utilize appropriate cleaning and infection control procedures when preparing pharmaceutical\* and natural health products
- dispose of unserviceable pharmaceutical products\* in compliance with current and applicable legislation\* and established policies and procedures in practice settings\*
- select and label the appropriate pharmaceutical product\* container in compliance with established regulations

4. *The graduate has reliably demonstrated the ability to*

**release pharmaceutical products\* in compliance with pertinent legislation\* and established standards, policies and procedures in practice settings\*.**

#### **Elements of the Performance**

- release the pharmaceutical product\* to the pharmacist\* for final check and signature or perform an independent double check\* within the scope of practice of the pharmacy technician\*
- confirm that patients\* or patients' agents\* receive an offer to be counselled by the pharmacist\* and advise the pharmacist\* if further consultation is necessary before releasing a pharmaceutical product\*
- determine the need for and provide relevant information material to patients\* or patients' agents\*
- preserve the integrity of pharmaceutical products\* by packaging them in compliance with product characteristic requirements and established regulations, policies and procedures in practice settings\*
- select and employ the appropriate drug distribution method in compliance with established regulations, policies and procedures in practice settings\*
- ensure the safe distribution and delivery of pharmaceutical products\* to the designated patient\*, patient's agent\*, health care provider\* or health care facility
- document, file, store and maintain all pharmaceutical product\* distribution activities in compliance with established regulations
- prepare and complete accurate billing to the patient\* and/or department or third party as required

5. *The graduate has reliably demonstrated the ability to*

**collaborate with the pharmacist\* and other health care providers\* to optimize the patient's\* health and well-being within the scope of practice of the pharmacy technician\*.**

#### **Elements of the Performance**

- participate as an active member of a pharmacy team within the scope of practice of the pharmacy technician\*
- promote and contribute to the patient's\* health and well-being within the scope of practice of the pharmacy technician\*
- respect diversity\* while interacting with patients\*, co-workers and others
- collaborate with health care providers\* in the circle of care\* to support optimal health outcomes for patients\*
- act as a resource to protect the interests of patients\* in compliance with current and applicable legislation\* and established standards, policies and procedures in practice settings\*
- perform all pharmacy-related functions in ways that ensure personal, patient\* and co-worker safety in practice settings\*

6. *The graduate has reliably demonstrated the ability to*

**promote quality assurance by performing effective and efficient administrative functions in practice settings\*.**

### **Elements of the Performance**

- manage inventory safely, efficiently and accurately by applying best practices in compliance with current and applicable legislation\* as well as established standards, policies and procedures in practice settings\*
- store, transmit and/or dispose of expired pharmaceutical products\* safely, securely and efficiently in compliance with current and applicable legislation\* and established standards, policies and procedures in practice settings\*
- handle and dispose of hazardous substances and wastes, including sharps, such as syringes, needles, scalpels and lancets, as well as biohazardous substances and wastes, such as chemical, radioactive and biomedical materials, in compliance with health and safety standards, the Workplace Hazardous Materials Information System (WHMIS) and current and applicable legislation\*, and established standards, policies and procedures in practice settings\*
- receive, verify and reconcile prescription\* drug orders in compliance with current and applicable legislation\* and established standards, policies and procedures in practice settings\*
- contribute to the management of effective and efficient pharmaceutical product\* distribution systems in practice settings\*
- collaborate with the pharmacist\*, pharmaceutical manufacturers, suppliers, wholesalers and/or other pharmacies to maintain effective and efficient operations in compliance with established policies and procedures in practice settings\*
- maintain the integrity of the drug supply chain by safeguarding against counterfeit products or sourcing from unknown wholesalers or sellers
- apply fundamental merchandising techniques in compliance with established policies and procedures in practice settings\*
- apply pricing strategies in compliance with established policies and procedures in practice settings\*
- ensure proper processing of third party payments, such as filing insurance claims, claims adjudication, reimbursement follow-up and record retention
- organize and provide pharmacy services by applying effective prioritization and time management techniques
- complete all documentation pertaining to inventory management, including narcotics, as well as controlled, targeted controlled, investigational, special access and hazardous drugs in compliance with current and applicable legislation\* and established standards, policies and procedures in practice settings\*
- maintain a clean, safe and orderly working environment

7. *The graduate has reliably demonstrated the ability to*

**optimize medication therapy management\* and product distribution using current technologies in practice settings\*.**

### **Elements of the Performance**

- utilize current pharmacy informatics\* to enter, update, access, retrieve and store entries and records
- utilize online systems to generate, maintain and update patient\* and third party payments, profiles and reports
- utilize online and manual systems for billings, claims and reports, to resolve claims and issues, and to reconcile third party payments
- utilize medication management software to perform drug interaction and allergy checks and respond appropriately to warnings in compliance with current and applicable legislation\* and established standards, policies and procedures in practice settings\*
- utilize technological tools, such as automated dispensing machines, unit dose packaging equipment, infusion devices and compounding devices in an effective and efficient manner in compliance with health and safety standards, Workplace Hazardous Materials Information System (WHMIS) and current and applicable legislation\*
- perform routine equipment maintenance in compliance with manufacturers' specifications
- utilize appropriate diagnostic and monitoring devices to troubleshoot minor mechanical breakdowns
- demonstrate to patients\* and/or patients' agents\* the proper use of point-of-care monitoring devices, drug delivery systems and medical supplies and equipment, such as blood glucose meters, spirometers, blood pressure monitors and EpiPens

8. *The graduate has reliably demonstrated the ability to*

**develop and implement effective strategies for ongoing personal and professional development that support currency, competence, ethics and values in the pharmacy sector.**

#### **Elements of the Performance**

- develop and implement strategies for ongoing self-evaluation and reflective practice, such as maintaining a record of continuing education or a learning portfolio
- solicit and accept constructive feedback from peers, co-workers and supervisors, and adjust behaviour accordingly
- use performance appraisal evaluations to enhance professional development
- identify when and how to assist, mentor and support peers and co-workers
- develop a professional development plan for maintaining current knowledge and competence
- adapt to changing practice trends within the pharmacy sector
- use current, relevant and evidence-based resources to maintain current knowledge and competence in the pharmacy sector
- promote competence and professionalism by supporting professional associations and organizations in the pharmacy sector

## Glossary

**Circle of Care** – Health care team members who have direct responsibilities for providing health care or assisting in providing health care to the patient. The circle of care includes, but is not limited to the team of health care professionals (i.e., those covered by the *Regulated Health Professions Act, 1991*, Schedule 1) and unregulated health care providers. The circle of care may also include patients' agents and family members who have the consent of the patient or patient's agents to disclose the patient's personal health information. By way of e-Health, the circle of care may also include private and public health care professionals from across the province or nation.

**Dispensing** – Selection, preparation and transfer of one or more doses of a drug to a patient or his or her representative for administration. Under the *Regulated Health Professions Act, 1991*, dispensing is defined as a controlled act, meaning that only authorized health professionals may perform this activity. Under the *Pharmacy Act, 1991*, pharmacy technicians are authorized to dispense under the terms, conditions and limitations of their certificate of registration. In line with the Ontario College of Pharmacist Standards of Practice, 2003, authorized personnel who are adequately trained and qualified (e.g., pharmacy technicians) can perform the technical aspects of the dispensing process within their scope of practice. This includes receiving and reading the prescription, entering the order, selecting the drug or determining the product to dispense, reconstituting a product, labelling, packaging and/or re-packaging pharmaceutical products for release. Release of pharmaceutical products is allowed once a pharmacist or pharmacy technician endorses the accuracy of the dispensed pharmaceutical product by applying his or her written or electronic signature. The pharmacist is accountable for verifying the therapeutics of the prescription and for discussing prescribed pharmaceutical products with patients or patients' agents.

**Diversity** – Diverse populations, including but not limited to age, ethnicity, race, gender, ability, social and economic class or sexual orientation and health states that are representative of individuals, groups, patients and colleagues with whom graduates will interact.

**Health Care Providers** – Regulated health care professionals and unregulated health care providers who have direct responsibilities for providing health care or assisting in providing health care to the patient.

**Independent Double Check** – The process by which a second authorized individual (as defined under the *Regulated Health Professions Act, 1991* and the *Drug and Pharmacies Regulation Act, 1990*) conducts a valid and unbiased verification to safeguard against medication errors.

**Legislation** – All relevant and current laws, including but not limited to the *Controlled Drugs and Substances Act, 1996*, *Drug and Pharmacies Regulation Act*,

*1990, Drug Interchangeability and Dispensing Fee Act, 1990, Food and Drugs Act, 1985, Occupational Health and Safety Act, 1990, Ontario Drug Benefit Act, 1990, Personal Health Information Protection Act, 2004, Personal Information Protection and Electronic Documents Act, 2000, Pharmacy Act, 1991, Public Hospitals Act, 1990, Regulated Health Professions Act, 1991, Transparent Drug System for Patients Act, 2006, and Workplace Hazardous Materials Information System.*

**Medication Therapy Management** – Also known as pharmaceutical care, it is the responsible provision of drug therapy for the purpose of maintaining or improving the patient’s quality of life. Within their scope of practice, pharmacy technicians assist the pharmacist and other health care providers in the promotion of optimal health outcomes for the patient by performing patient-focused activities to identify, prevent, and resolve drug-related problems.

**Patient** – In this document, the term “patient” refers to patient, client, resident or customer.

**Patient’s Agent** – A person designated to act on behalf of the patient, such as a member of the patient’s immediate family, an individual who has a close personal relationship with the patient, an individual who personally provides care to the patient or someone who is legally entrusted to handle the patient’s affairs (e.g. a substitute decision maker).

**Pharmaceutical Product** – Any drug product that can be purchased commercially from a pharmaceutical company or prepared in a pharmacy. Pursuant to a prescription, extemporaneous mixtures include both sterile and non-sterile compounds that are prepared in and dispensed from a pharmacy. Sterile compounds include, for example, intravenous admixtures, total parenteral nutrition, eye preparations, solutions for irrigation and wound care, injectable antineoplastic agents and epidural products. Non-sterile compounds include, for example, creams, ointments, suppositories, capsules, suspensions, powders and solutions.

**Pharmacist** – A health care provider who is registered with the Ontario College of Pharmacists under the *Pharmacy Act, 1991*. The practice of pharmacy is the promotion of health, prevention and treatment of diseases, dysfunction and disorders through medication and non-medication therapy; the monitoring and management of medication therapy; the custody, compounding and the dispensing of drugs; the provision of health care aids and devices and information related to their use.

*Source: Adapted from Ontario College of Pharmacists Health Professions Regulatory Advisory Council Submission Scope of Practice of Pharmacy, June, 19, 2008*

**Pharmacy Informatics** – Computerized pharmacy and patient information and communication systems and networks used to acquire, compile, store, retrieve,

analyze, evaluate and disseminate the necessary patient care and health information as permitted by legislation. This information includes, but is not limited to, electronic health records, clinical information (e.g., drug, prescription and medication use, and drug interactions), patient accounts and medical insurance records. Pharmacy informatics enable the pharmacist and other authorized individuals (as defined under the *Regulated Health Professions Act, 1991* and the *Drug and Pharmacies Regulation Act, 1990*) to engage in e-prescribing and medication therapy management. Pharmacy informatics can also be used for the purpose of maintaining the administrative and financial aspects of the pharmacy, as well as continuous pharmacy education and public awareness and education.

**Pharmacy Technician** – A pharmacy technician is a health care provider regulated by the Ontario College of Pharmacists under the *Pharmacy Act, 1991*, who, in collaboration with a pharmacist, is authorized, within the terms, conditions and limitations on the certificate of registration, to dispense, sell and compound medications, to receive, order and manage inventory, to interact with patients and health care providers, and to assist the pharmacist in the provision of medication therapy management and pharmacy services.

**Practice Setting** – The environment in which pharmaceutical products are processed, dispensed and released, and where learners in the accredited Pharmacy Technician program gain supervised work experience, including community/retail pharmacies and pharmacies in hospital and long-term care facilities.

**Prescription** – A verbal, written or electronically-transmitted order issued or authorized by a regulated practitioner (i.e., those covered by the *Regulated Health Professions Act, 1991*) directing the dispensing of a stated amount of any drug or mixture of drugs specified therein for the designated person or animal.

*Source: Adapted from Food and Drug Regulations, C.R.C., c. 870C.01.001, April 15, 2009*

**Regulated Health Care Professionals** – Those individuals who are members of a regulatory body mandated by the *Regulated Health Professions Act, 1991* (RHPA) Schedule 1, and its companion acts. The RHPA sets the legislative framework for self-regulation and the companion acts contain the scope of practice, professional designation and title, and the controlled acts approved for the profession. Regulated health professionals guide, direct, teach and may, under specific conditions, delegate controlled acts to unregulated health care providers (unregulated health care providers perform clearly identified services under the direction and/or supervision of a patient, patients' agent, family member, regulated health professional or employer). Moreover, the regulated health professional has the responsibility to provide continuing supervision for unregulated health care providers.

### III. Essential Employability Skills

*All graduates of the Pharmacy Technician program of instruction must have reliably demonstrated the essential employability skills learning outcomes listed on the following pages, in addition to achieving the vocational learning outcomes and meeting the general education requirement.*

#### Context

Essential Employability Skills (EES) are skills that, regardless of a student's program or discipline, are critical for success in the workplace, in day-to-day living and for lifelong learning.

The teaching and attainment of these EES for students in, and graduates from, Ontario's colleges of applied arts and technology are anchored in a set of three fundamental assumptions:

- these skills are important for every adult to function successfully in society today;
- our colleges are well equipped and well positioned to prepare graduates with these skills; and
- these skills are equally valuable for all graduates, regardless of the level of their credential, whether they pursue a career path, or they pursue further education.

#### Skill Categories

To capture these skills, the following six categories define the essential areas where graduates must demonstrate skills and knowledge.

- Communication
- Numeracy
- Critical Thinking & Problem Solving
- Information Management
- Interpersonal
- Personal

## Application and Implementation

In each of the six skill categories, there are a number of defining skills, or sub skills, identified to further articulate the requisite skills identified in the main skill categories. The following chart illustrates the relationship between the skill categories, the defining skills within the categories, and learning outcomes to be achieved by graduates from all postsecondary programs of instruction that lead to an Ontario College credential.

EES may be embedded in General Education or vocational courses or developed through discrete courses. However these skills are developed, all graduates with Ontario College credentials must be able to reliably demonstrate the essential skills required in each of the six categories.

<b>SKILL CATEGORY</b>	<b>DEFINING SKILLS: Skill areas to be demonstrated by graduates:</b>	<b>LEARNING OUTCOMES: The levels of achievement required by graduates. The graduate has reliably demonstrated the ability to:</b>
COMMUNICATION	<ul style="list-style-type: none"> <li>• Reading</li> <li>• Writing</li> <li>• Speaking</li> <li>• Listening</li> <li>• Presenting</li> <li>• Visual literacy</li> </ul>	<ol style="list-style-type: none"> <li>1. <i>communicate clearly, concisely and correctly in the written, spoken and visual form that fulfills the purpose and meets the needs of the audience.</i></li> <li>2. <i>respond to written, spoken, or visual messages in a manner that ensures effective communication.</i></li> </ol>
NUMERACY	<ul style="list-style-type: none"> <li>• Understanding and applying mathematical concepts and reasoning</li> <li>• Analyzing and using numerical data</li> <li>• Conceptualizing</li> </ul>	<ol style="list-style-type: none"> <li>3. <i>execute mathematical operations accurately.</i></li> </ol>
CRITICAL THINKING & PROBLEM SOLVING	<ul style="list-style-type: none"> <li>• Analyzing</li> <li>• Synthesizing</li> <li>• Evaluating</li> <li>• Decision making</li> <li>• Creative and innovative thinking</li> </ul>	<ol style="list-style-type: none"> <li>4. <i>apply a systematic approach to solve problems.</i></li> <li>5. <i>use a variety of thinking skills to anticipate and solve problems.</i></li> </ol>

<b>SKILL CATEGORY</b>	<b>DEFINING SKILLS: Skill areas to be demonstrated by graduates:</b>	<b>LEARNING OUTCOMES: The levels of achievement required by graduates. The graduate has reliably demonstrated the ability to:</b>
INFORMATION MANAGEMENT	<ul style="list-style-type: none"> <li>• Gathering and managing information</li> <li>• Selecting and using appropriate tools and technology for a task or a project</li> <li>• Computer literacy</li> <li>• Internet skills</li> </ul>	<p>6. <i>locate, select, organize and document information using appropriate technology and information systems.</i></p> <p>7. <i>analyze, evaluate and apply relevant information from a variety of sources.</i></p>
INTERPERSONAL	<ul style="list-style-type: none"> <li>• Team work</li> <li>• Relationship management</li> <li>• Conflict resolution</li> <li>• Leadership</li> <li>• Networking</li> </ul>	<p>8. <i>show respect for the diverse opinions, values, belief systems and contributions of others.</i></p> <p>9. <i>interact with others in groups or teams in ways that contribute to effective working relationships and the achievement of goals.</i></p>
PERSONAL	<ul style="list-style-type: none"> <li>• Managing self</li> <li>• Managing change and being flexible and adaptable</li> <li>• Engaging in reflective practices</li> <li>• Demonstrating personal responsibility</li> </ul>	<p>10. <i>manage the use of time and other resources to complete projects.</i></p> <p>11. <i>take responsibility for one's own actions, decisions and consequences.</i></p>

## IV. General Education Requirement

*All graduates of the Pharmacy Technician program must have met the general education requirement described on the following pages, in addition to achieving the vocational and essential employability skills learning outcomes.*

### Requirement

The General Education Requirement for programs of instruction is stipulated in the Credentials Framework (Appendix A in the Minister's Binding Policy Directive *Framework for Programs of Instruction*).

In programs of instruction leading to either an Ontario College Diploma or an Ontario College Advanced Diploma, it is required that graduates have been engaged in learning that exposes them to at least one discipline outside their main field of study and increases their awareness of the society and culture in which they live and work. This will typically be accomplished by students taking 3 to 5 courses (or the equivalent) designed discretely and separately from vocational learning opportunities.

This general education learning would normally be delivered using a combination of required and elective processes.

### Purpose

The purpose of General Education in the Ontario college system is to contribute to the development of citizens who are conscious of the diversity, complexity and richness of the human experience; who are able to establish meaning through this consciousness; and who, as a result, are able to contribute thoughtfully, creatively and positively to the society in which they live and work.

General Education strengthens student's essential employability skills, such as critical analysis, problem solving and communication, in the context of an exploration of topics with broad-based personal and/or societal importance.

## Themes

The themes listed below will be used to provide direction to colleges in the development and identification of courses that are designed to fulfill the General Education Requirement for programs of instructions.

Each theme provides a statement of Rationale and offers suggestions related to more specific topic areas that could be explored within each area. These suggestions are neither prescriptive nor exhaustive. They are included to provide guidance regarding the nature and scope of content that would be judged as meeting the intent and overall goals of General Education.

### **1. Arts in Society:**

#### *Rationale:*

The capacity of a person to recognize and evaluate artistic and creative achievements is useful in many aspects of his/her life. Since artistic expression is a fundamentally human activity, which both reflects and anticipates developments in the larger culture, its study will enhance the student's cultural and self-awareness.

#### *Content:*

Courses in this area should provide students with an understanding of the importance of visual and creative arts in human affairs, of the artist's and writer's perceptions of the world and the means by which those perceptions are translated into the language of literature and artistic expression. They will also provide an appreciation of the aesthetic values used in examining works of art and possibly, a direct experience in expressing perceptions in an artistic medium.

### **2. Civic Life:**

#### *Rationale:*

In order for individuals to live responsibly and to reach their potential as individuals and as citizens of society, they need to understand the patterns of human relationships that underlie the orderly interactions of a society's various structural units. Informed people will have knowledge of the meaning of civic life in relation to diverse communities at the local, national, and global level, and an awareness of international issues and the effects of these on Canada, and Canada's place in the international community.

#### *Content:*

Courses in this area should provide students with an understanding of the meaning of freedoms, rights and participation in community and public life, in addition to a working knowledge of the structure and function of various levels of government (municipal, provincial, national) in Canada and/or in an international context. They may also provide an historical understanding of major political issues affecting relations between the various levels of government in Canada and their constituents.

### **3. Social and Cultural Understanding:**

*Rationale:*

Knowledge of the patterns and precedents of the past provide the means for a person to gain an awareness of his or her place in contemporary culture and society. In addition to this awareness, students will acquire a sense of the main currents of their culture and that of other cultures over an extended period of time in order to link personal history to the broader study of culture.

*Content:*

Courses in this area are those that deal broadly with major social and cultural themes. These courses may also stress the nature and validity of historical evidence and the variety of historical interpretation of events. Courses will provide the students with a view and understanding of the impact of cultural, social, ethnic, or linguistic characteristics.

### **4. Personal Understanding:**

*Rationale:*

Educated people are equipped for life-long understanding and development of themselves as integrated physiological and psychological entities. They are aware of the ideal need to be fully functioning persons: mentally, physically, emotionally, socially, spiritually and vocationally.

*Content:*

Courses in this area will focus on understanding the individual: his or her evolution, situation, relationship with others, place in the environment and universe, achievements and problems, and his or her meaning and purpose. They will also allow students the opportunity to study institutionalized human social behaviour in a systematic way. Courses fulfilling this requirement may be oriented to the study of the individual within a variety of contexts.

### **5. Science and Technology:**

*Rationale:*

Matter and energy are universal concepts in science, forming a basis for understanding the interactions that occur in living and non-living systems in our universe. Study in this area provides an understanding of the behaviour of matter that provides a foundation for further scientific study and the creation of broader understanding about natural phenomena

Similarly, the various applications and developments in the area of technology have an increasing impact on all aspects of human endeavour and have numerous social, economic and philosophical implications. For example, the operation of computers to process data at high speed has invoked an interaction between machines and the human mind that is unique in human history. This development and other technological developments have a powerful impact on how we deal with many of the complex questions in our society.

*Content:*

Courses in this area should stress scientific inquiry and deal with basic or fundamental questions of science rather than applied ones. They may be formulated from traditional basic courses in such areas of study as biology, chemistry, physics, astronomy, geology, or agriculture. As well, courses related to understanding the role and functions of computers (e.g., data management and information processing) and assorted computer-related technologies, should be offered in a non-applied manner to provide students with an opportunity to explore the impact of these concepts and practices on their lives.