

1. COURSE DESCRIPTION:

This course will provide students with the basics of computer use to dispense medications within the community pharmacy setting. Retail pharmacy software will be used to practice the full process of dispensing prescriptions. Students will be expected to utilize critical thinking skills to determine if each step of this process is accurate, safe and adheres to current legislation. The learner will gain experience with the payment methods when dispensing prescriptions or non-prescription medications.

This course is designed to enable students to attain competencies specified in the National Association of Pharmacy Regulatory Authorities (NAPRA) Professional Competencies for Canadian Pharmacy Technicians at Entry to Practice September 2007.

(Note: The following is a summary only. Please consult the original documents at www.napra.ca)

Competency #1 Legal, Ethical, and Professional Responsibilities

Pharmacy technicians meet legal, ethical, and professional responsibilities in the performance of their practice.

Competency Units

- 1.1 Meet legal requirements.
- 1.2 Uphold and act on ethical principles.
- 1.3 Demonstrate professionalism

Competency #2 Professional Collaboration and Team Work

Pharmacy technicians work in collaborative relationships within health care teams to optimize patient safety and improve health outcomes.

Competency Units

- 2.1 Collaborate to meet patient health care needs, goals, and outcomes.

Competency #3 Drug Distribution: Prescription and Patient Information

Pharmacy technicians promote safe and effective drug distribution by receiving, gathering, entering, and storing prescription and patient information so that this information can be easily accessed and retrieved.

Competency Units

- 3.1 Receive a prescription.
- 3.2 Process the prescription.
- 3.3 Transfer prescription authorizations to another pharmacy provider at patients' requests.

Competency #4 Drug Distribution: Product Preparation

Pharmacy technicians promote safe and effective drug distribution by preparing products in a manner that ensures patient safety through the accuracy and quality of the product.

Competency Units

- 4.1 Select, Prepare, and Package Products for Release.

NAPRA Competencies continued:

Competency #5 Drug Distribution: Product Release

Pharmacy technicians promote safe and effective drug distribution by releasing and distributing products in a manner that ensures patient safety.

Competency Units

- 5.1 Ensure accuracy and quality of the final product.
- 5.2 Collaborate with the pharmacist in the release of the product.
- 5.3 Document all aspects of drug distribution activities.

Competency #6 Drug Distribution: System and Inventory Controls

Pharmacy technicians collaborate in the management of systems for drug distribution and inventory control to ensure patient safety and the safety, accuracy, quality, integrity, and timeliness of the product.

Competency Units

- 6.1 Manage the drug distribution system.
- 6.2 Manage inventory.

Competency #7 Communication and Education

Pharmacy technicians communicate effectively with patients, pharmacists, other health care team members, and educate, where appropriate, in order to promote and support optimal patient care and well-being.

Competency Units

- 7.1 Establish and maintain effective communications.
- 7.2 Provide information and education.
- 7.3 Document, in compliance with legislation, standards, policies, and procedures.

Competency #8 Management Knowledge and Skills

Pharmacy technicians apply management knowledge, principles, and skills.

Competency Units

- 8.1 Manage operations occurring within their practice environment.
- 8.2 Manage administrative activities occurring within their practice environment.
- 8.3 Manage financial elements associated with the processing of prescriptions.

Competency #9 Quality Assurance

Pharmacy technicians collaborate in developing, implementing, and evaluating quality assurance and risk management policies, procedures and activities.

Competency Units

- 9.1 Participate in quality assurance processes.
- 9.2 Ensure the safety and integrity of pharmaceutical products.
- 9.3 Contribute to the creation and maintenance of a safe working environment and conditions.

This course is designed to enable students to attain the educational outcomes specified in the Canadian Pharmacy Technician Educators Association (CPTEA) Educational Outcomes for Pharmacy Technician Programs in Canada.(March 2007)

(Note: *The following is a summary only. Please consult the original documents at www.cptea.ca)*

1.0 ASSUME LEGAL, ETHICAL, AND PROFESSIONAL RESPONSIBILITIES.

Description: Pharmacy technicians shall comply with legal requirements, practise within ethical guidelines and professional standards of practice and established policies and procedures; and, demonstrate professional integrity and the ability to fulfill professional responsibilities.

2.0 COMMUNICATE WITH PATIENTS, PATIENTS' AGENTS, AND HEALTHCARE PROVIDERS.

Description: Pharmacy technicians communicate with groups and individuals to support optimal client care and to promote health. Communication can be with the patients or their agents, pharmacists, pharmacy technicians, pharmacy personnel, and other healthcare providers.

3.0 COLLABORATE WITH THE PHARMACIST AND MEMBERS OF THE HEALTHCARE TEAM.

Description Pharmacy technicians, as members of the pharmacy and healthcare teams, collaborate in the preparation, release, and supply management of pharmaceutical products. Their work supports the goal of optimal patient outcomes, pharmacy practice, and inter-professional relations.

4.0 PROCESS PRESCRIPTIONS IN COMPLIANCE WITH LEGISLATION AND ESTABLISHED POLICIES AND PROCEDURES.

Description: Pharmacy technicians, acting within legislation and established policies and procedures, support safe and effective patient care by receiving prescriptions and entering and storing information that can be easily accessed, retrieved, and provided to the appropriate healthcare provider.

5.0 PREPARE PHARMACEUTICAL PRODUCTS FOR RELEASE TO PATIENTS OR THEIR AGENTS, IN COMPLIANCE WITH LEGISLATION AND ESTABLISHED POLICIES AND PROCEDURES.

Description: Pharmacy technicians, acting within legislation and established policies and procedures, acquire products, perform calculations, measure ingredients, and prepare sterile and non-sterile extemporaneous products and those from formulae for release to patients or their agents.

CPTEA Outcomes continued:

6.0 PERFORM DRUG DISTRIBUTION.

Description: Pharmacy technicians contribute to drug distribution by performing the functions of acquisition, preparation, and distribution of drug products and dosage forms in a manner that ensures the safety, accuracy, and quality of supplied products. They demonstrate the technical skills that are within pharmacy technician practice, including the use of computers and other technological tools. They use the business principles, policies, and procedures of their practice settings to support the preparation and release of quality pharmaceutical products.

7.0 ASSUME MANAGEMENT, ADMINISTRATIVE, AND QUALITY ASSURANCE RESPONSIBILITIES TO ENSURE THAT PATIENTS RECEIVE QUALITY PHARMACEUTICAL PRODUCTS.

Description: Pharmacy technicians have a significant role in the efficient and effective operation of a pharmacy. Their role includes knowledgeable use of electronic, technical, and technological means to enter, access and retrieve information, do reimbursement, billing, co-payment, and report writing. They contribute to the working environment, quality assurance, and quality improvement processes of the pharmacy.

II. LEARNING OUTCOMES AND ELEMENTS OF THE PERFORMANCE:

Upon successful completion of this course, the student will demonstrate the ability to:

1. receive and interpret prescriptions

Potential Elements of the Performance:

- Identify all the key information needed in order to process prescriptions electronically, including the prescription components, patient profile, physician profile and drug file. (N3.1.1,N3.1.2,C4.6.1)
- Demonstrate mathematical skills in calculating the dosage, quantity to be dispensed and days' supply with consistency and accuracy.(N3.2.3,C5.4,C5.5,C5.6,C5.7)
- Interpret prescriptions and identify issues requiring clarification. (N3.1.2,N3.1.3,C4.4,C4.5.1,C4.5.2,C4.8)

2. process prescriptions using pharmacy software

Potential Elements of the Performance:

- Describe the layout of the computing system, including patient profile, physician profile, drug file and third party billing. (C7.5.3)
- Process prescriptions with the computer software with accuracy and completeness of database entry .(N3.2.4,C2.5.1)
- Utilize the relevant resources (e.g. CPS, Ontario Drug Benefit Formulary etc.) found in a community pharmacy appropriately to ease the prescription processing (e.g. drug schedules, drug interchangeability etc...).(C4.7.3)

3. dispense a variety of prescriptions safely and accurately
Potential Elements of the Performance:
 - Dispense the medications correctly according to the printed prescription labels, determining the size and types of dispensing vials as well as affixing the prescription and auxiliary labels appropriately. (N4.1.1,N4.1.2,C5.8,C5.17,C5.18.C7.3.1)
 - Practice good time management skills with an emphasis on prioritizing duties.(N3.2.1,N8.1.1,C4.2,C4.9.2)
 - Be familiar with generic and brand names of common medications.(C4.6.2)
 - Apply the principles of “The Five Rights” of medication safety.(C6.1)

4. apply legal, ethical and professional principles to all aspects of dispensing
Potential Elements of the Performance:
 - Understand and work within the scope of practice of Pharmacy Technician.(C1.1,C1.4)
 - Demonstrate personal and professional integrity. (N1.2.3)

(Note: *The letters and numbers in brackets used above refer to the competencies and outcomes as found in the original documents at www.napra.ca and www.cptea.ca e.g. N3.1.3 would refer to NAPRA competency 3, competency unit 3.1 and competency element 3.1.3)*

III. TOPICS:

1. Introduction
 - Introduction to the course
 - Overview of the dispensing process
 - Introduction to Kroll software
 - Introduction to the lab -layout, practices and procedures
 - Introduction to resources to aid dispensing e.g. CPS, ODB formulary etc.,

2. Intake of prescription
 - Acceptable modes of prescription receipt
 - Gathering patient information

3. Prescription components
 - Legal requirements and completeness
 - Time frames for validity
 - Authenticity/ forgery issues
 - Requirements according to drug schedules
 - Prescribing rights and limitations

4. Interpreting prescriptions
 - Legibility issues
 - Terminology, Latin abbreviations and short forms
 - Clarification procedure
 - Use of relevant resources
5. Drug considerations
 - Brand/ generic names for common medications
 - Dosage forms
 - DIN numbers
 - Drug schedules and storage
 - Top 200 drugs
6. Computer data entry
 - Patient information
 - Physician information
 - Medication selection
 - Calculations for quantities to dispense
 - Introduction to directions for use
 - Reducing medication errors
7. Considerations for different dosage forms
 - Quantities and directions for use for oral medications, anti-infectives, oral contraceptives, inhaled drugs, liquids, topical, ophthalmics, otic, nasal, insulins, injectables, vaginal, rectal, transdermal
 - Weekly and oddly dosed drugs
 - Tapering doses
8. Final steps in computer processing
 - Communicating alerts e.g. interactions, allergies (both computer generated and operator identified)
 - Generating patient counselling printout
9. Filling a prescription
 - Counting
 - Measuring liquids/topicals
 - Weighing
 - Container and closure selection
 - Documentation

10. Labelling

- Affixing computer labels to different types of product
- Auxiliary labels

11. Documentation

- Record keeping of prescriptions, filing and retrieval
- Prescription scanning
- Maintenance of documentation and confidentiality.

12. Introduction to third party billing

- Legislation (The Drug Interchangeability and Dispensing Fee Act (DIDFA) and The Ontario Drug Benefit Act (ODBA)

IV. REQUIRED RESOURCES/TEXTS/MATERIALS:

Compendium of Pharmaceuticals and Specialties (CPS). Ottawa: Canadian Pharmacists Association. Most recent edition available.

Community Pharmacy Practices for Pharmacy Technicians-Twenty-Second Edition, 2010-Marie Atlas and Audrey Faris. Caledon East: Pharmacy Tech. Consultants Ltd. ISBN : 978-0-98-9810411-0-0

Introduction to Pharmaceutical Dosage Forms for Pharmacy Technicians,2008-2009-Marie Atlas and Audrey Faris. Pharmacy Tech. Consultants Ltd. ISBN:978-0-98104411-2-4

Computer Prescription I for Pharmacy Technicians- Latest Edition, Audrey Faris, Pharmacy Tech Consultants Ltd.

V. EVALUATION PROCESS/GRADING SYSTEM:

Assignment	10%
Quizzes (2 @ 10% each)	20%
Labs – prescription processing (8 @ 5%)	40%
Final exam	30%
Total	100%

1. The pass mark for the course is 60%. The total grade is composed of marks accumulated as indicated above.
2. All policies and procedures as outlined in the current Student Success Guide related to submitting assignments, scholarly work/academic honesty, tests and examinations.
3. **No supplements** will be provided for tests.

The following semester grades will be assigned to students:

<u>Grade</u>	<u>Definition</u>	<u>Grade Point Equivalent</u>
A+	90 – 100%	4.00
A	80 – 89%	3.00
B	70 - 79%	2.00
C	60 - 69%	1.00
D	50 – 59%	0.00
F (Fail)	49% and below	
CR (Credit)	Credit for diploma requirements has been awarded.	
S	Satisfactory achievement in field /clinical placement or non-graded subject area.	
U	Unsatisfactory achievement in field/clinical placement or non-graded subject area.	
X	A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course.	
NR	Grade not reported to Registrar's office.	
W	Student has withdrawn from the course without academic penalty.	

NOTE: Mid Term grades are provided in theory classes and clinical/field placement experiences. Students are notified that the midterm grade is an interim grade and is subject to change.

Note: For such reasons as program certification or program articulation, certain courses require minimums of greater than 50% and/or have mandatory components to achieve a passing grade.

A minimum of a “C” grade is required to be successful in all PTN coded courses.

It is also important to note, that the minimum overall GPA required in order to graduate from a Sault College program remains 2.0.

VI. SPECIAL NOTES:Attendance:

Sault College is committed to student success. There is a direct correlation between academic performance and class attendance; therefore, for the benefit of all its constituents, all students are encouraged to attend all of their scheduled learning and evaluation sessions. This implies arriving on time and remaining for the duration of the scheduled session.

VII. COURSE OUTLINE ADDENDUM:

The provisions contained in the addendum located on the portal form part of this course outline.