

Vocational Training Program

5802

Pharmacy Technical Assistance

Training Sector

19

Health Services

Reach for
your **Dreams**

Québec 

Vocational Training Program

5802

Pharmacy Technical Assistance

Training Sector

19

Health Services

Formation professionnelle et technique
et formation continue

Direction générale des programmes
et du développement

Development Team

Coordination

Jean-Pierre Fons

Coordinator, Health Sector
Ministère de l'Éducation, du Loisir et du Sport

Ghislaine Timmons-Plamondon

Coordinator, Health Sector
Ministère de l'Éducation, du Loisir et du Sport

Design and Development

Josée Beuparlant

Pharmacist-Teacher
École de formation professionnelle de Châteauguay
Commission scolaire des Grandes-Seigneuries

André Adan

Program development consultant
Didaction

English Version

Direction de la production en langue anglaise
Services à la communauté anglophone
Ministère de l'Éducation, du Loisir et du Sport

Technical Editing

Josée Beuparlant

Pharmacist-Teacher
École de formation professionnelle de Châteauguay
Commission scolaire des Grandes-Seigneuries

© Gouvernement du Québec
Ministère de l'Éducation, du Loisir et du Sport, 2006–05-00940

ISBN 2-550-46282-3 (version imprimée)
ISBN 2-550-46283-1 (PDF)

Legal Deposit – Bibliothèque nationale du Québec, 2006

Acknowledgments

The Ministère de l'Éducation, du Loisir et du Sport would like to thank the many people working in the field and in the education community who helped in the development of this vocational training program, in particular the following individuals:

Representatives Employed in the Field

France Boulet
Head Pharmacist
Verdun Hospital Centre
Association des pharmaciens en établissement
de santé du Québec

Normand Cadieux
Executive Director
Association québécoise des pharmaciens propriétaires

Pierre Ducharme
Secretary General
Québec Order of Pharmacists

Manon Lambert
Executive Director
Association des pharmaciens en établissement de santé
du Québec

Richard Mayrand
Vice-President, Professional Affairs
(Jean Coutu Group)
Association des bannières et des chaînes de pharmacies
du Québec

Nathalie Plante
Director, Professional Development and Training
Jean Coutu Group

Representatives Employed in Education

Josée Beauparlant
Pharmacist-Teacher
École de formation professionnelle de Châteauguay
Commission scolaire des Grandes-Seigneuries

Martin Chevarie
Pharmacist-Teacher
Commission scolaire des Premières-Seigneuries

Céline Crête
Pharmacist-Teacher
Commission scolaire de Montréal

Martine Dubois
Pharmacist-Teacher
Lester-B.-Pearson School Board

Geneviève Beaudry
Pharmacist-Teacher
Lester-B.-Pearson School Board

Lucie Couture
Pharmacist-Teacher
Commission scolaire des Premières-Seigneuries

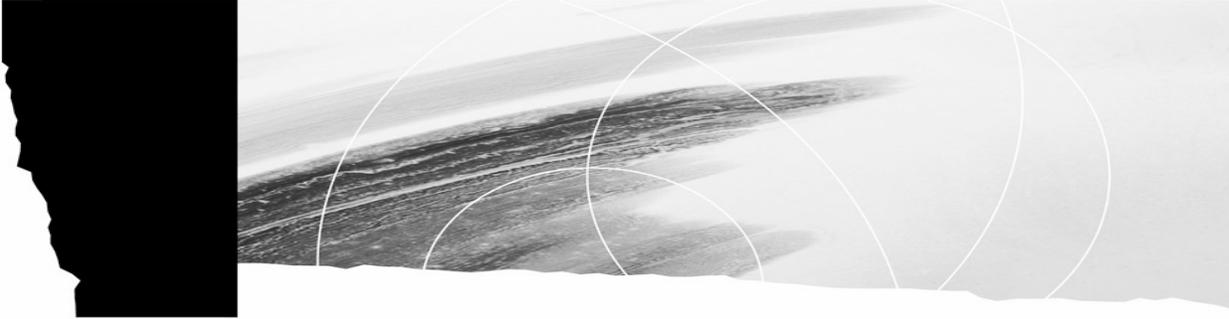
Joanne Daudelin
Assistant Director
Commission scolaire des Grandes-Seigneuries

France Laberge
Pharmacist-Teacher
Commission scolaire des Grandes-Seigneuries

Richard Lamontagne
Pharmacist-Teacher
Commission scolaire de Montréal

Table of Contents

Introduction to the Program.....	1
Particulars	1
Glossary	3
Part I	
Program Goals	9
Educational Aims.....	9
Program Competencies and Grid of Competencies	11
Harmonization	13
Part II	
Objectives	
The Occupation and the Training Process.....	17
Basic Word Processing	21
Non-Parenteral Drugs	23
Legislation and Professional Ethics	27
Pharmaceutical Calculations.....	31
Principles and Techniques of Hygiene and Asepsis.....	35
Pharmaceutical Applications Software.....	39
Non-Sterile Preparations.....	43
Dispensing in Community Pharmacies	47
Parenteral Drugs	53
Communication and Teamwork	55
Occupational Health and Safety	59
Customer Service and Inventory Management.....	63
Dispensing in Health Care Establishments.....	67
Sterile Preparations.....	73
Planning a Job Search	77
Practicum in an Extended Care Facility	79
Practicum in a Community Pharmacy.....	85
Practicum in a Hospital	91



5802

Pharmacy Technical Assistance

Year of approval: 2005

Certification:	Diploma of Vocational Studies
Number of credits:	82
Number of modules:	19
Total duration:	1230 hours

To be admitted to the *Pharmacy Technical Assistance* program, students must meet one of the following conditions:

- Persons holding a Secondary School Diploma or its recognized equivalent.
- OR
- Persons who are at least 16 years of age on September 30 of the school year in which their training is to begin and have earned the Secondary IV credits in language of instruction, second language and mathematics in the programs of study established by the Minister, or have been granted recognition of equivalent learning.
- OR
- Persons who are at least 18 years of age upon entry into the program and have the following functional prerequisites: the successful completion of the general development test and SPR 3, 4, 5, 6 or recognition of equivalent learning.
- OR
- Persons having earned Secondary III credits in language of instruction, second language and mathematics in the programs of study established by the Minister and who will continue their general education courses concurrently with their vocational training in order to obtain the credits they are missing among the following: Secondary IV language of instruction, second language and mathematics in the programs of study established by the Minister.

Introduction to the Program

The vocational training curriculum, from which this program of study derives, is the responsibility of both the Ministère de l'Éducation, du Loisir et du Sport, which develops programs and their teaching guides, and the educational institutions, which implement the programs and the evaluation process. Programs of study include compulsory objectives and suggestions for competency-related knowledge, skills, attitudes and perceptions.

Programs of study provide teachers with a frame of reference for planning teaching activities. They define the scope of teaching strategies by identifying the broad educational orientations to be favoured and the objectives to be attained. By successfully completing a program, students acquire not only the entry-level competencies required by the workplace in order to practise a trade or occupation, but also learning that provides students with a certain degree of versatility.

The duration of the program is 1230 hours, which includes 765 hours spent on the specific competencies required to practise the occupation and 465 hours on general, work-related competencies. The program of study is divided into 19 modules, which vary in length from 15 to 120 hours. The total hours allocated to the program include time devoted to evaluation for certification purposes and to remedial work.

Particulars

The requirements of the job market and the legal conditions surrounding the hiring of pharmacy technical assistants are such that individuals graduating with a DVS in *Pharmacy Technical Assistance* must be at least 18 of years by the time they enter the job market.

Title of Module	Code	Module	Hours	Credits
The Occupation and the Training Process	753 502	1	30	2
Basic Word Processing	753 515	2	75	5
Non-Parenteral Drugs	753 526	3	90	6
Legislation and Professional Ethics	753 532	4	30	2
Pharmaceutical Calculations	753 544	5	60	4
Principles and Techniques of Hygiene and Asepsis	753 552	6	30	2
Pharmaceutical Applications Software	753 564	7	60	4
Non-Sterile Preparations	753 572	8	30	2
Dispensing in Community Pharmacies	753 588	9	120	8
Parenteral Drugs	753 594	10	60	4
Communication and Teamwork	753 602	11	30	2
Occupational Health and Safety	753 611	12	15	1
Customer Service and Inventory Management	753 626	13	90	6
Dispensing in Health Care Establishments	753 638	14	120	8

Sterile Preparations	753 646	15	90	6
Planning a Job Search	753 651	16	15	1
Practicum in an Extended Care Facility	753 665	17	75	5
Practicum in a Community Pharmacy	753 677	18	105	7
Practicum in a Hospital	753 687	19	105	7

Glossary

Program

A vocational training program is a coherent set of competencies to be acquired. It is formulated in terms of objectives and divided up into modules for administrative purposes. It describes the learning expected of students in accordance with a given performance level. Published as an official pedagogical document, the program leads to the recognition of training qualifying students to practise a trade or occupation.

A vocational training program includes compulsory objectives and content. Although the educational institutions are responsible for learning and evaluation activities, the program presents suggestions for competency-related knowledge, skills, attitudes and perceptions that must be enriched or adapted according to the needs of students, and information regarding the certification of studies.¹

Program Goals

Program goals consist of the expected outcome at the end of training as well as a general description of a given trade or occupation. They also include the four general goals of vocational training.

Educational Aims

Educational aims are broad orientations to be favoured during training in order to help students acquire intellectual or motor skills, work habits or attitudes. Educational aims usually address important aspects of personal and vocational development that have not been explicitly included in the program goals or competencies. They help guide educational institutions in implementing the program.

Competency

A competency is the ability to act successfully and evolve in order to adequately perform work-related tasks or activities, based on an organized body of knowledge and skills from a variety of fields, perceptions, attitudes, etc.

Objectives

Objectives refer to the operational aspect of a competency to be acquired. They are expressed in terms of specific requirements and serve as the practical basis for teaching, learning and evaluation. Objectives are either behavioural or situational.

Objectives also provide indicators for learning, related knowledge, skills, attitudes and perceptions, and associated guidelines. These indicators are grouped according to elements of the competency (in the case of behavioural objectives), and according to phases of the learning context (in the case of situational objectives).

1. Behavioural Objective

A behavioural objective is a relatively closed objective that describes the actions and results expected of the student. Behavioural objectives consist of the following components:

- The *statement of the competency*, which is the result of the job analysis, the general goals of the program and other determinants.
- The *elements of the competency*, which correspond to essential details that are necessary in order to understand the competency and are expressed in terms of specific behaviours. They refer to the major steps involved in performing a task or the main components of the competency.

¹ Specifications regarding certification complement the program of study, but are presented in another document. Evaluation criteria are prescriptive.

- The *achievement context*, which corresponds to the situation in which the competency is exercised at entry-level on the job market. The achievement context does not specify the context for learning or evaluation.
- The *performance criteria*, which define the requirements by which to judge the attainment of the competency. They may refer to each element of the competency, to several elements or to the competency as a whole. Those associated with a specific element correspond to the requirements for performing a task or activity; those associated with several elements indicate the expected level of performance or the overall quality of a product or service.

Evaluation is based on expected results.

2. Situational Objective

A situational objective is a relatively open-ended objective that outlines the major phases of a learning situation in which a student is placed. It allows for output and results to vary from one student to another. Situational objectives consist of the following components:

- The *statement of the competency*, which is the result of the job analysis, the general goals of the program and other determinants.
- The *elements of the competency*, which outline the essential aspects of the competency and ensure a better understanding of the expected outcome.
- The *learning context*, which provides a broad outline of the learning situation designed to help the students develop the required competency. It is normally divided into three phases of learning:
 - information
 - participation
 - synthesis
- The *instructional guidelines*, which provide guidelines and means to ensure that learning takes place and that the context in which it occurs is always the same. These guidelines may include general principles or specific procedures.
- The *participation criteria*, which describe requirements the students must fulfill when participating in the learning activities. They focus on how the students take part in the activities rather than on the results obtained. Participation criteria are normally provided for each phase of the learning context.

Evaluation is based on the student's participation in the activities suggested in the learning context.

Competency-Related Knowledge, Skills, Attitudes and Perceptions

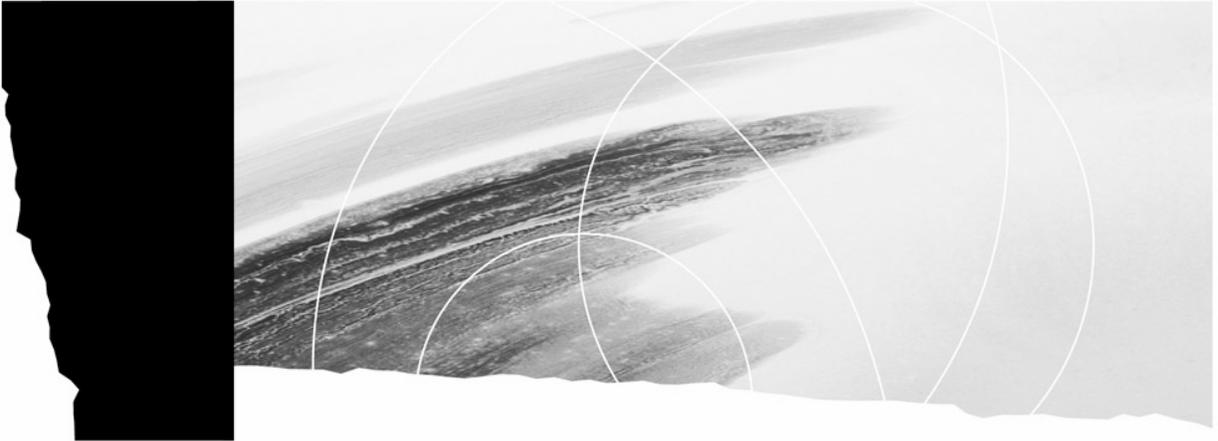
Competency-related knowledge, skills, attitudes and perceptions define the essential and important learning that the student must acquire in order to apply and continue to develop the competency. They correspond to activities in the job market and are accompanied by guidelines that provide information on the field of application, the level of complexity or content related to training. The knowledge, skills, attitudes and perceptions and the related guidelines are not prescriptive.

Module

A module is a component of a program of study comprising a prescriptive objective and suggestions for competency-related knowledge, skills, attitudes and perceptions.

Credit

A credit is a unit used for expressing quantitatively the value of the modules in a program of study. One credit corresponds to 15 hours of training. Students must accumulate a set number of credits to obtain a diploma or attestation.



Part I

Program Goals

Educational Aims

**Program Competencies and
Grid of Competencies**

Harmonization

Program Goals

The *Pharmacy Technical Assistance* program prepares students to practice the occupation of Pharmacy Technical Assistant.

Pharmacy Technical Assistants work under the supervision of pharmacists in community pharmacies and health care establishments.

Their primary function is to assist the pharmacist in dispensing prescriptions, creating and updating patients' records as well as distributing and selling pharmaceutical products and drugs. They are also called on to prepare and package drugs under the pharmacist's supervision and maintain inventory.

The program goals of the *Pharmacy Technical Assistance* program are based on the general goals of vocational training. These goals are:

- To help students develop effectiveness in the practice of a trade or occupation, that is:
 - to teach students to perform roles, functions, tasks and activities associated with the trade or occupation upon entry into the job market
 - to prepare students to progress satisfactorily on the job (which implies having the technical and technological knowledge and skills in such areas as communication, problem solving, decision making, ethics, health and safety)
- To help students integrate into the work force, that is:
 - to familiarize students with the job market in general and the context surrounding the trade or occupation they have chosen
 - to familiarize students with their rights and responsibilities as workers
- To foster students' personal development and acquisition of occupational knowledge, skills, perceptions and attitudes, that is:
 - to help students develop their autonomy and ability to learn, and acquire effective work methods
 - to help students understand the principles underlying the techniques and the technology used in the trade or occupation
 - to help students develop self-expression, creativity, initiative and entrepreneurial spirit
 - to help students adopt the attitudes required to successfully practise the trade or occupation, and instill in them a sense of responsibility and a concern for excellence
- To promote job mobility, that is:
 - to help students develop positive attitudes toward change
 - to help students develop the means to manage their careers by familiarizing them with entrepreneurship

Educational Aims

Educational aims are broad orientations based on important concerns and values that help guide educational institutions in implementing the program. Educational aims usually address important aspects of personal and vocational development that have not been explicitly included in the program goals or competencies. These aims can help students acquire intellectual or motor skills, work habits or attitudes.

Educational aims encourage teachers to intervene in a given direction each time an appropriate situation arises. These aims are ongoing and help students develop, in particular, habits, attitudes and other aspects outside the scope of the program goals.

The educational aims of the *Pharmacy Technical Assistance* program are the following:

- To help students develop an awareness of quality work and its benefits
- To help students develop initiative, a sense of responsibility and the desire to do good work
- To help students acquire work methods and develop a sense of discipline, thus achieving consistency in their work
- To help students develop the habit of self-evaluation
- To help students develop a positive attitude toward change and new situations
- To foster a desire to keep informed of all aspects of the field

Program Competencies and Grid of Competencies

List of Competencies

- To determine their suitability for the occupation and the training process.
- To use basic word-processing functions.
- To apply concepts related to non-parenteral drugs.
- To observe the laws governing the exercise of the occupation and apply the rules of professional ethics.
- To do pharmaceutical calculations.
- To apply principles and techniques of hygiene and asepsis.
- To use pharmaceutical applications software.
- To make non-sterile preparations.
- To perform tasks related to dispensing in community pharmacies.
- To apply concepts related to parenteral drugs.
- To communicate in the workplace and work in a team.
- To take occupational health and safety precautions.
- To apply customer service and inventory management techniques.
- To perform tasks related to dispensing in health care establishment pharmacies.
- To make sterile preparations.
- To plan a job search.
- To perform occupational tasks in an extended care facility.
- To perform occupational tasks in a community pharmacy.
- To perform occupational tasks in a hospital.

Grid of Competencies

The grid of competencies shows the relationship between general competencies, which correspond to work-related activities, and specific competencies, which are required to practise the particular trade or occupation, as well as the major steps in the work process.

The general competencies appear on the horizontal axis and the specific competencies, on the vertical axis. The symbol (Δ) indicates a correlation between a specific competency and a step in the work process. The symbol (\circ) indicates a correlation between a general and a specific competency. Shaded symbols indicate that these relationships have been taken into account in the formulation of objectives related to specific competencies.

The logic used in constructing the grid influences the course sequence. Generally speaking, this sequence follows a logical progression in terms of the complexity of the learning involved and the development of the students' autonomy. The vertical axis presents the specific competencies in the order in which they should be acquired. The modules on the horizontal axis should be taught in relation to those on the vertical axis. This means that some modules are prerequisite to others, while other modules are taught concurrently.

GRID OF COMPETENCIES

PHARMACY TECHNICAL ASSISTANCE	GENERAL COMPETENCIES											WORK PROCESS									
	Competency Number	Type of Objective	Duration (in hours)	To use basic word processing functions	To apply concepts related to non-parenteral drugs	To observe the laws governing the exercise of the occupation and apply the rules of professional ethics	To do pharmaceutical calculations	To apply principles and techniques of hygiene and asepsis	To use pharmaceutical applications software	To apply concepts related to parenteral drugs	To communicate in the workplace and work in a team	To take occupational health and safety precautions	To plan a job search	Become familiar with the work to be done	Plan the work	Perform the assigned tasks	Respond to individual requests	Have their work checked	Record the necessary information	File the documents used	Clean, disinfect if necessary and store materials
				2	3	4	5	6	7	10	11	12	16	B	B	S	B	B	B	B	S
Competency Number	Type of Objective	Duration (in hours)	90	90	30	60	30	60	60	30	15	15									
					○					○					△						
			○	●	●	●	●	●	○		○		△	▲	▲	▲			△	▲	
			●	●	●	●	●	●		○	○		△	▲	▲	▲	▲	▲	▲	▲	
			○	●	●		●		●	●	●		△	▲	▲		▲	▲	▲	▲	
			●	●	●	●	●	●	●	○	●		△	▲	▲		▲	▲	▲	▲	
			●	●	●	●	●	●	●	●	●	○	▲	▲	▲	▲	▲	▲	▲	▲	
			●	●	●	●	●	●	●	●	●	○	▲	▲	▲	▲	▲	▲	▲	▲	

Harmonization

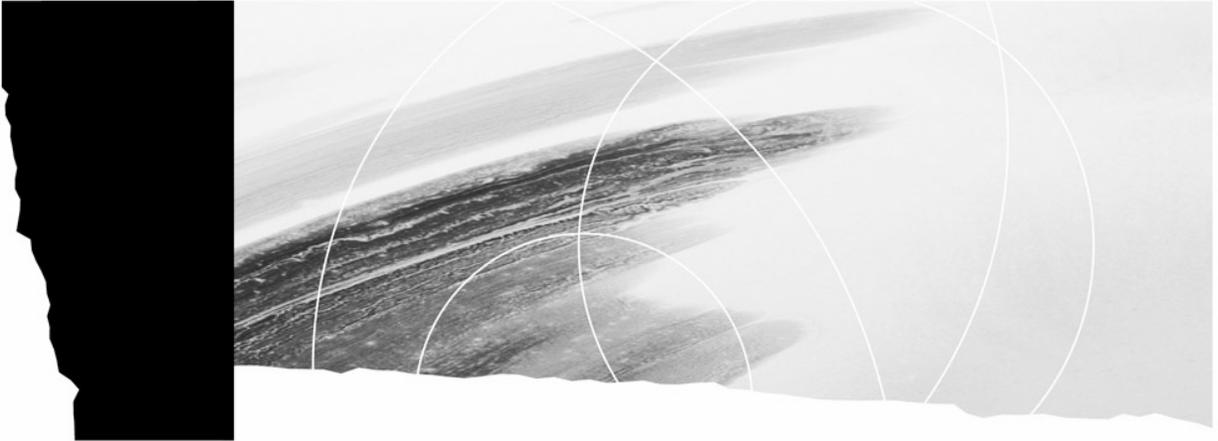
The Ministère de l'Éducation, du Loisir et du Sport harmonizes its vocational and technical programs by establishing similarities and continuity between secondary- and college-level programs within a particular sector or between sectors, in order to avoid overlap in program offerings, recognize prior learning and facilitate the students' progress.

Harmonization establishes consistency between training programs and is especially important in ensuring that the tasks of a trade or occupation are clearly identified and described. Harmonization makes it possible to identify tasks requiring competencies that are common to more than one program. Even if there are no common competencies, training programs are still harmonized.

Harmonization is said to be “inter-level” when it focuses on training programs at different levels, “intra-level” when it focuses on programs within the same educational level, and “inter-sector” when carried out between programs in various sectors.

An important aspect of harmonization is that it allows the common features of competencies to be identified and updated as needed. Common competencies are those that are shared by more than one program; once acquired in one program, they can be recognized as having been acquired in another. Competencies with exactly the same statement and elements are said to be identical. Common competencies that are not identical but have enough similarities to be of equal value are said to be equivalent.

The *Pharmacy Technical Assistance* program does not share any competencies with other programs at this time.



Part II

Objectives

Module 1 Duration 30 hours

Situational Objective

Statement of the Competency

To determine their suitability for the occupation and the training process.

Elements of the Competency

During this module, the students will:

- Become familiar with the nature of the occupation.
- Understand the training process.
- Confirm their career choice.

Learning Context

Information Phase

- Learning about the job market in pharmacy technical assistance—work environments (types of community and health care establishment pharmacies), personnel and working conditions in each of the work environments (schedules, salaries, etc.) and job requirements.
- Learning about the role of pharmacy technical assistants, their main tasks, the limits of their position and the importance of their work.
- Learning about the specific characteristics of the work: physical layout, procedures, work teams, atmosphere and equipment.
- Learning about the tasks performed by pharmacy technical assistants working in community pharmacies, their working conditions (e.g. pace, posture, atmosphere, etc.), types of customers and aspects of the job that are verified by the pharmacist.
- Learning about the experiences of a graduate working as a pharmacy technical assistant, interesting aspects of the job, difficulties encountered, and the skills and qualities required to practise the occupation.
- Discussing the origins of the occupation, its prospects, the role of the Association des assistantes et assistants techniques en pharmacie and its main current concerns with a representative of the Association.
- Presenting the information gathered and sharing their current views of the occupation during a class discussion.

Participation Phase

- Making a list of the skills, aptitudes, attitudes and knowledge needed to practise the occupation.
- Learning about the program of study.
- Sharing their initial reactions to the occupation and the training process.

Synthesis Phase

- Producing a report in which they specify their preferences, aptitudes and interests with respect to the occupation and verify that these are compatible with the job requirements of pharmacy technical assistance.
- Identifying aspects of their personality that justify their decision and their preferred workplace (a community pharmacy or a health care establishment pharmacy).
- Explaining why they choose to continue or withdraw from the training program.

Instructional Guidelines

The teacher should:

- Ensure that resource persons are available and well informed.
- Plan and organize workplace visits.
- Provide students with the materials needed to carry out the activities.
- Direct students' research on the occupation and the training program.
- Advise the students to keep the notes they take during various activities for use in class discussions.
- Provide students with instructions to follow during workplace visits.
- Lead class discussions.
- Encourage all students to engage in discussions and express their opinions.
- Offer students an accurate and objective view of the occupation.
- Provide students with the means to assess their career choice honestly and objectively.

Participation Criteria

Information Phase

- Gather information on most of the topics to be covered.
- Follow instructions during workplace visits.
- Express their present views on the occupation in comparison with their initial views.

Participation Phase

- Carefully review the documents provided.
- Relate the content of the training program to the requirements of the occupation.

Synthesis Phase

- Present a report in which they relate their preferences, aptitudes, attitudes and knowledge to the occupation as well as their personal qualities.
- Explain why they choose to continue or withdraw from the training program.

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the learning context, the elements of the competency related to each phase as well as the instructional guidelines.

Information Phase

- State the main rules governing group discussions.
- Choose a technique for taking notes, making summaries and doing written assignments.

- Identify methods for proper observation. Perception, curiosity
List of points to observe
- Participate in group discussions.
- Use resources to enter, annotate and summarize information.
- Observe workplaces and situations.
- Use verbal interview techniques.
- Present information and viewpoints verbally.
- Use print and electronic documents.

Participation Phase

- Describe the qualities required by the occupation.
- Summarize the components of the program of study.
- Express their views of the occupation.

Synthesis Phase

- Use tools of self-discovery.
- Summarize the personal aptitudes that are compatible with the requirements of the occupation.
- Justify their choice of preferred workplace.
- Express their motivation for pursuing vocational training in *Pharmacy Technical Assistance*.

Module 2 Duration 75 hours

Behavioural Objective

Statement of the Competency

To use basic word-processing functions.

Achievement Context

- Using a computer, a French keyboard and a printer
- With word-processing software

Elements of the Competency

1. Use an alphanumeric keyboard.

2. Input data and simple texts requiring the use of various keys on the keyboard.

3. Print a document.

Performance Criteria

- Use of home keys
- Use of keys in the home key row as well as those in the rows above and below
- Use of keys on the numeric keypad
- Use of all keyboard keys
- Application of ergonomic principles

- Use of key or keys appropriate to the document to be input or printed
- Satisfactory use of cursor
- Observance of procedure for saving texts
- Observance of procedure for exiting software

- Proper inspection, powering on and adjusting of printer
- Visual check of printed document

For the competency as a whole:

- Net typing speed of 25 words a minute for two minutes
- Proper ergonomic posture
- Conformity of document with instructions

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

1. Use an alphanumeric keyboard.
 - Apply ergonomic principles.

Adjustment of furniture and equipment
 Position of back, hands and fingers
 Eyes level with text being input

- Apply proper fingering technique to increase typing speed.
 - Method for calculating the average number of words per minute
 - Discipline and dedication
 - Eyes follow text to be input
 - Fingers remain on home keys
 - Find ways to create various characters that are missing from certain keyboards.
 - ASCII code
 - Key functions and combinations
2. Input data and simple texts requiring the use of various keys on the keyboard.
- Use the computer and its peripherals.
 - Terminology
 - Identification of the main components and their function
 - Use of mouse and cursor
 - Operation in both stand-alone and network mode
 - Distinguish among the types of software programs and storage media.
 - Terminology
 - Identification of the operating system
 - Identification of software programs and the most commonly used menus
 - Location of documents on the hard disk, a diskette or CD
 - Navigate the user interface.
 - Navigation screen and tools
 - Procedures for opening and closing an application
 - Procedure for exiting the operating system
 - Input both text and numbers.
 - Opening the word-processing software in the operating system
 - Opening, recovering and saving a document in a file
 - Development of command and dexterity with respect to the equipment and operating system
 - Development of typing speed
 - Self-confidence
3. Print a document.
- Access the software's Print function.
 - Check the printer's status.
 - Proper connections
 - Paper tray full
 - Printer cartridge changed
 - Use the print command.
 - Troubleshooting and problem solving

Module 3 Duration 90 hours

Behavioural Objective

Statement of the Competency

To apply concepts related to non-parenteral drugs.

Achievement Context

- Working with commonly prescribed non-parenteral drugs
- Taking into account the legal and therapeutic classifications of drugs used by the Régie de l'assurance maladie du Québec (RAMQ)

Elements of the Competency

1. Identify the class or subclass of commonly prescribed non-parenteral drugs.
2. Associate the brand names of common non-parenteral drugs with their common names.
3. Identify the dosage forms and concentrations of common non-parenteral drugs.
4. Identify the routes of administration of common non-parenteral drugs.
5. Identify the specific procedures for storing various types of non-parenteral drugs.

Performance Criteria

- Identification of the legal class of drugs according to the extent to which they are controlled
- Identification of the therapeutic class or subclass of drugs
- Association of a drug's brand name or names with its common name
- No spelling errors when writing common and brand names
- Identification of dosage forms of each drug presented
- Identification of the concentration or concentrations of the main active ingredients of a drug's various dosage forms
- Identification of the route or routes of administration of a drug's various dosage forms
- Identification of the brand name of the device required to administer a drug by the pulmonary route
- Account taken of the manufacturer's instructions, the regulations regarding the storage of drugs and the established storage system

For the competency as a whole:

- Use of correct terminology
- Accurate identifications and associations

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

1. Identify the class or subclass of commonly prescribed non-parenteral drugs.

- Review the primary features of the human body.
 - Main organs of the human body
 - Main functions of each system in the human body
 - Role of the main components of the digestive, cardiovascular, respiratory, urinary, reproductive, musculoskeletal, sensory and nervous systems
- Associate terms frequently used in pharmacy to denote classes and subclasses of drugs with organs or components of a system in the human body.
 - Classes and subclasses according to the RAMQ drug formulary

2. Associate the brand names of common non-parenteral drugs with their common names.

- Distinguish between a drug's brand name and its common or generic name.
- Consult the RAMQ drug formulary
- Identify the name, logo and monogram of the main drug manufacturers.
- Identify the main chemical symbols used in pharmacy.
 - Periodic Table of Elements

3. Identify the dosage forms and concentrations of common non-parenteral drugs.

- Distinguish among the most common dosage forms of non-parenteral drugs, their characteristics and the abbreviations used to represent them.
 - Purpose of the indented line or lines found on some tablets
 - Distinction between a suspension that must be prepared and a suspension that is ready for use
- Explain the difference between a vehicle, an excipient, a diluent, an adjuvant and an active ingredient.
- Explain what is meant by the concentration of a drug and the means used to express it.
 - Percentages and ratios
 - Use of metric system
- Use different colours and graphic shapes to indicate the concentration of a drug.
 - Perception of shapes and colours
 - Manufacturer's monograms

4. Identify the routes of administration of common non-parenteral drugs.

- Distinguish among the various routes of administration.
 - Routes of administration: oral or per os, rectal, vaginal, topical, sublingual, otic, ophthalmic, nasal, pulmonary, transdermal

- Identify the meaning of each abbreviation used to represent the route of administration of non-parenteral drugs.

Module 4 Duration 30 hours

Situational Objective

Statement of the Competency

To observe the laws governing the exercise of the occupation and apply the rules of professional ethics.

Elements of the Competency

During this module, the students will:

- Become familiar with the legal provisions related to the exercise of the occupation.
- Become familiar with the requirements of the occupation in terms of professional behaviour.
- Evaluate their ability to observe the laws and regulations related to the exercise of the occupation and to apply the rules of professional ethics.

Learning Context

Information Phase

- Learning about the federal and provincial laws and regulations related to the field of pharmacy and their scope.
- Defining the following terms: drug identification number, targeted substances, narcotics, non-prescription medication, register, safety-closed device, label, inspection, prescription, patient's record, delegated tasks, schedules.
- Learning about the provisions of the laws and regulations dealing with each of the aforementioned topics.

Participation Phase

- Identifying the meaning of each item on the manufacturer's label for each drug provided and specifying what is important with respect to the occupation of pharmacy technical assistant.
- Learning about the legal provisions applicable to the writing and filling of prescriptions.
- Producing a label for the prescribed drug and verifying its conformity with the *Regulation respecting the labelling of medications and poisons* of the *Pharmacy Act*.
- Learning about the meaning of the elements in a patient's record.
- Writing patients' records in longhand and verifying the conformity of the information with the *Regulation respecting the keeping of records, books and registers by a pharmacist in the practice of his profession* of the *Pharmacy Act*. Examining the following aspects in particular: updating records, period of activity of patients' records and specific characteristics of patients' records in health care establishments.
- Learning about the contents of the summary table of regulations concerning narcotics, controlled drugs, benzodiazepines and other targeted substances in community pharmacies. Using the information in the table to record the proper drugs in the registry of poisons and narcotic and controlled drugs.
- Learning about the *Regulation respecting the keeping of pharmacies*, the *Regulation respecting the terms and conditions for the sale of medications*, the federal *Controlled Drugs and Substances Act* and the *Benzodiazepines and Other Targeted Substances Regulations*. Determine the location where each of the drugs named by the teacher should be stored.
- Using standard 90.01 issued by the Quebec Order of Pharmacists concerning the acts described in section 10 of the *Pharmacy Act*, identify the acts that may be performed by classes of persons other than pharmacists, including medication container content verification.
- Summarizing the aspects of the occupation affected by laws and regulations and identifying the ensuing responsibilities and consequences of errors. Learning about the importance of Bill 113 in health care establishments.

Synthesis Phase

- Producing a report in which they specify their knowledge of laws and regulations related to the exercise of the occupation.
- Identifying the requirements of the occupation in terms of professional behaviour (e.g. rules of presentation, language and dress).
- Making a list of the professional behaviours to be adopted when working in a team, communicating with customers, handling drugs and money, and gathering personal information about patients.
- Analyzing various situations illustrating the behaviour of a pharmacy technical assistant in the workplace; noting the behaviours that are consistent with or that contravene the rules of professional ethics.
- Analyzing the pharmacy technical assistant's behaviour in terms of team performance, customer satisfaction and the image of the establishment.
- Analyzing their ability to observe the laws and regulations governing the exercise of the occupation, as well as their aptitudes with regard to professional behaviours to be adopted in the workplace.
- Discussing the results of their analysis and possible methods for improving.

Instructional Guidelines

The teacher should:

- Present the laws and regulations related to the field of pharmacy.
- Provide students with the materials and documentation needed to carry out the activities.
- Determine in advance the duration of each activity, inform students of it and respect it.
- Lead class discussions.
- Encourage all students to engage in discussions and express their opinions.
- Create a climate that stimulates the students' interest and motivation.
- Provide support and supervision for both individual and group activities.
- Provide students with a variety of legible prescriptions for common drugs.
- Correct errors as they arise and clarify points as needed to ensure that students understand.
- Present all the categories of narcotics, controlled drugs and targeted substances appearing in the table during the relevant activity.
- Make a list of drugs and pharmaceutical products for the activity on storing drugs, using the following categories: narcotics, over-the-counter products containing codeine, controlled drugs, benzodiazepines, non-prescription medication (Schedule II and Schedule III of the *Regulation respecting the terms and conditions for the sale of medications*), prescription drugs, drugs that must be stored in the refrigerator and injectable drugs.
- Draw up a questionnaire to enable students to assess their knowledge of the legal provisions related to the exercise of the occupation.
- Create hypothetical situations representative of the workplace that are designed to help students develop good judgment with regard to ethical behaviours to be adopted in the workplace.

Participation Criteria

Information Phase

- Attempt to define the given terms and relate them to the relevant laws and regulations.
- Participate actively in the class discussion of activities carried out by groups.

Participation Phase

- Show diligence in carrying out the activities.
- Participate actively and seriously in class discussions.

Synthesis Phase

- Complete the questionnaire to assess their knowledge of laws and regulations.
- Participate in drawing up the list of professional behaviours.
- Show diligence in identifying satisfactory or unsatisfactory behaviour in given situations.
- Participate seriously in the class discussion of the information gathered.
- Present a self-evaluation of their ability to observe laws and regulations.

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the learning context, the elements of the competency related to each phase as well as the instructional guidelines.

Information Phase

- Recognize the importance of cooperation and negotiation in teamwork.
- Read legal texts. Distinction between a law, a regulation and standards of practice

Participation Phase

- Compare the legal definitions of each of the following substances: drug, poison, stupeficient, narcotic, medication, cosmetic and food.
- Relate the applicable laws and regulations to the work of a pharmacy technical assistant. Legal classification of drugs
Principle and application of delegated acts

Synthesis Phase

- Distinguish between a code of ethics and a code of professional conduct. Pharmacists' professional code of ethics
Moral judgment and personal sense of ethics

Module 5 Duration 60 hours

Behavioural Objective

Statement of the Competency

To do pharmaceutical calculations.

Achievement Context

- Using prescriptions
- With the information required to solve calculation problems

Elements of the Competency

1. Do calculations concerning the dosage and quantity of drugs as well as the duration of treatment.
2. Calculate the final concentration of a drug.
3. Calculate the quantity of ingredients required for extemporaneous compounding.
4. Calculate the quantity of ingredients required to obtain a dilution of a stock solution or a reduced concentration of a preparation.
5. Using alligation, calculate the quantity of ingredients required to obtain a solution of a given concentration.

Performance Criteria

- Identification of abbreviations and symbols related to the quantity and frequency of administration of drugs
- Conversion of data from one metric unit of measure to another
- Conversion of data from a unit of measure in one system to another in a different system
- Calculation of dosage according to the dosage form or concentration of the drug
- Calculation of the total quantity of the drug
- Calculation of the duration of treatment
- Calculation of the flow rate of a solution
- Calculation of the concentration as a ratio or percentage according to the quantities of ingredients indicated
- Calculation of the concentration of a powdered drug occupying a significant volume of a vial
- Calculation of the quantity of each ingredient according to the total quantity and concentration required for the prescription
- Calculation of the weight or volume of ingredients when reducing or increasing the quantities specified in the prescription
- Correct use of calculation formula
- Correct use of calculation method

For the competency as a whole:

- Accuracy of calculations
- Expression of results in the required unit of measure

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

1. Do calculations concerning the dosage and quantity of drugs as well as the duration of treatment.

- Note the information written in the prescription. Quantity, duration of treatment, dosage
Units of measure of the apothecaries', imperial and metric systems
Abbreviations of the most common dosage forms
Abbreviations related to the frequency of administration of drugs
Roman numerals
- Perform the four basic mathematical operations with whole numbers to obtain accurate and estimated results.
- Perform mathematical operations involving fractions and decimals. Expression of ratios and proportions
Rules of rounding off generally applied in pharmacy work
- Solve simple mathematical problems using the ratio and proportion method. Selection of data for problem solving
Conversion of required units of measure
Rules to follow when writing metric measurements
- Calculate the flow rate of a solution. Concept of solution density
- Identify the consequences of calculation errors. Accuracy of dosage

2. Calculate the final concentration of a drug.

- Convert a concentration expressed as a ratio into a percentage and vice versa. Percentages: % w/v, % w/w, % v/v, % v/w

3. Calculate the quantity of ingredients required to obtain a dilution of a stock solution or a reduced concentration of a preparation.

- Recognize when it is necessary to make a dilution using a stock solution. Frequently used pharmacy stock solutions

4. Using alligation, calculate the quantity of ingredients required to obtain a solution of a given concentration.
 - Recognize when it is necessary to use alligation.

Module 6 Duration 30 hours

Behavioural Objective

Statement of the Competency

To apply principles and techniques of hygiene and asepsis.

Achievement Context

- In a work area requiring the application of hygienic and aseptic techniques
- Using appropriate materials

Elements of the Competency

1. Associate micro-organisms with infection and the most common communicable diseases.

2. Associate hygienic precautions intended to prevent and contain infection with concrete occupational situations.

3. Apply hygienic and aseptic techniques.

Performance Criteria

- Association of the main types of micro-organisms with the most common communicable diseases
- Identification of micro-organisms' routes of entry into the human body
- Identification of the factors that promote the growth of micro-organisms
- Identification of the factors that predispose to infection
- Identification of the signs of infection and its consequences for oneself and others
- Identification of the methods of transmission of common diseases

- Association of appropriate personal and professional hygienic precautions with the situations presented
- Appropriate reasoning to justify the precautions taken in particular situations

- Correct choice of products according to the task
- Proper performance of the following tasks: antiseptic hand washing; putting on and removal of protective clothing required for preparations including cytotoxic drugs; unpacking of sterile materials; placing of materials under horizontal and vertical laminar flow hoods; sanitary maintenance of equipment and materials used in the preparation of drugs
- Taking of aseptic precautions and measures specific to the handling of sterile products and materials

- Take appropriate precautions.
 - Antiseptic hand washing
 - Putting on and removal of protective clothing required for preparations including cytotoxic drugs
 - Unpacking of sterile materials
 - Placing of materials under horizontal and vertical laminar flow hoods
 - Sanitary maintenance of equipment and materials used in the preparation of drugs
- Take aseptic measures and precautions specific to the handling of sterile products and materials.
 - Sources of contamination in an aseptic area
 - Specific characteristics of using a horizontal laminar flow hood and a vertical laminar flow hood
- Recognize the importance of observing precautions and properly applying hygienic and aseptic techniques.

Module 7 Duration 60 hours

Behavioural Objective

Statement of the Competency

To use pharmaceutical applications software.

Achievement Context

- Working in a community pharmacy and a health care establishment pharmacy
- Working alone
- Using a computer, applications software and a printer
- Using instructions related to the operations to be performed and written information in the patient's medication profile
- With the required documents

Elements of the Competency

1. Use applications software for community pharmacies.
2. Use applications software for extended care facility pharmacies and hospital pharmacies.
3. Save the data and end the work session.

Performance Criteria

- Correct performance of the following operations:
 - creation of patient's record
 - updating of patient's record
 - deletion of patient's record
 - recording of prescriptions in patient's record
 - refill of a prescription
 - cancellation of a prescription
 - printing of label and receipt
 - printing of narcotic report
- Accuracy of data recorded
- Correct performance of the following operations:
 - creation of patient's record
 - updating of patient's record
 - archiving of patient's record
 - recording of prescriptions in patient's record
 - refill of prescriptions
 - modification or cancellation of a prescription
 - printing of medication profiles and other documents intended for nursing and medical staff
 - printing of labels
- Accuracy of data recorded
- Observance of procedure for saving data
- Observance of procedure for exiting software and shutting down system

For the competency as a whole:

- Correct use of software according to instructions
- Proper use of a recognized keyboarding technique
- Speed of execution

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

Knowledge, skills, attitudes and perceptions related to all elements of the competency

- Make optimal use of the keyboarding technique. Maintenance and acceleration of typing speed
- Follow the procedure for accessing the main menu and correct file.
- Recognize the importance of accurately inputting all the information required to access the network and applications software.
- Use a pharmaceutical label printer.

1. Use applications software for community pharmacies.

- Create, update and delete a patient's record. Legal provisions related to patients' records
Codes required to create patients' records and prescriptions
Most common comments found in patients' records and their importance
- Record, refill and cancel a prescription in a patient's record. Legal provisions related to prescriptions
Association of prescription information with the correct field
- Print documents. Labels and receipts
Most common reports and lists
Efficiency and time management
- Recognize the importance of accurately inputting all the required data.

2. Use applications software for extended care facility pharmacies and hospital pharmacies.

- Create, update and delete a patient's record. Legal provisions related to the content of patients' records and their archiving in health care establishments
- Record, refill, modify and cancel a prescription in a patient's record. Legal provisions related to prescriptions
Association of prescription information with the correct field

- Print required documents.
 - Recognize the importance of accurately inputting all the required data.
- Medication profile, reports for nurses and prescription refill record for doctors

3. Save the data and end the work session.

- Recognize the importance of saving data.

Distinction between saving data on the network and saving data on a stand-alone workstation

For the competency as a whole:

- Making optimal use of the keyboarding technique to increase typing speed
- Using the procedure to access the main menu and correct file
- Recognizing the importance of accurately inputting all the information required to access the network and applications software
- Using a pharmaceutical label printer:
 - loading paper, labels, receipts
 - changing the cartridge, adjusting the print features

Module 8 Duration 30 hours

Behavioural Objective

Statement of the Competency

To make non-sterile preparations.

Achievement Context

- Working alone
- Using prescriptions and their respective labels
- Using pre-established preparation procedures and instructions provided by the pharmacist
- With the materials needed to make the required preparations

Elements of the Competency**Performance Criteria**

1. Prepare the work.

- Accuracy of calculations
- Correct choice of materials and products
- Relevant verification of the condition of the materials and products to be used
- Presentation of calculations and products to be used to the pharmacist for approval
- Satisfactory preparation of the scale

2. Make non-sterile preparations using various drugs.

- Observance of the procedure for the selected technique
- Correct use of materials
- Accurate measurement of ingredients (weight, volume)
- Satisfactory reconstitution of a powdered drug

3. Make non-sterile preparations using raw materials.

- Observance of the procedure for the selected technique
- Correct performance of trituration and levigation
- Satisfactory use of tools and equipment
- Satisfactory homogeneity and consistency of preparation

4. Package the prepared drug.

- Correct choice of container according to the product's dosage form and required quantity
- Observance of bottling and packaging techniques
- Cleanliness of container after bottling or packaging

5. Produce the label and affix it and any auxiliary labels to the container.

- Correct choice of the label for the drug prepared
- Label affixed to proper location on container
- Correct choice of auxiliary label according to the protocol established by the pharmacist

6. Clean and store the materials and products.

- Cleanliness of materials and products
- Storage of products according to the established method
- Correct storage of materials

For the competency as a whole:

- Observance of general preparation procedure
- Observance of technical preparation procedures
- Observance of hygienic precautions
- Observance of precautions related to the use of materials and the handling of products
- Conformity of final product's appearance with the criteria established for each type of preparation
- Methodical, efficient organization of work
- Completion of tasks within a time limit appropriate to the complexity of the preparation

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

1. Prepare the work.

- | | |
|---|---|
| • Distinguish the prescriptions that require non-sterile preparations. | Terminology of common preparations
Specific notations of non-sterile preparations |
| • Apply the hygienic precautions related to the use of materials and the handling of pharmaceutical products. | Personal and professional precautions
Phenomenon and signs of a deteriorating drug |
| • Select the materials used for various non-sterile preparations. | |
| • Note any signs indicating a product has deteriorated. | Product expiry date
Odour, colour |
| • Identify the factors likely to influence product stability. | Concept of product stability |
| • Read the prescription to be filled. | Meaning of abbreviations contained in a prescription |
| • Perform calculations based on the information in the prescription and the products required. | Concentration and format |

2. Make non-sterile preparations using various drugs.
3. Make non-sterile preparations using raw materials.
 - Distinguish between the raw form of a drug and its manufactured form. Most common raw materials and drugs used in non-sterile preparations
 - Observe the procedure for the selected technique. Procedures, methods, instructions
Calculation of the quantity of ingredients required for a preparation
 - Perform trituration and levigation. Nature and functions of an excipient and an adjuvant
 - Select and use tools and equipment. Procedures to follow
Precautions related to the use of materials and the handling of equipment
 - Monitor the quality of the preparation. Standards of homogeneity and consistency
 - Organize the work efficiently. Time management and spatial organization
4. Package the prepared drug.
 - Use bottling and packaging techniques. Choice of container
Precise movements
 - Apply hygienic precautions.
5. Produce the label and affix it and any auxiliary labels to the container.
 - Review the accuracy of the information recorded on the label. Classification
Commercial and pharmaceutical data
Quantitative information
Form and appearance of drugs
 - Review the legal liability related to labelling. Legal requirements related to drug labelling
Regulations related to the occupation and the process of shared liability
Professional code and ethics
6. Clean and store the materials and products.
 - Apply hygienic techniques related to the maintenance of materials. Protocols and procedures
Instruction manuals
Cleaning equipment and methods
 - Apply health and safety precautions. Use of protective equipment and accessories
Diligence in the sequences of movements to be performed

Module 9 Duration 120 hours

Behavioural Objective

Statement of the Competency

To perform tasks related to dispensing in community pharmacies.

Achievement Context

- Using prescriptions
- With the drugs required
- With a computer, a printer and applications software for community pharmacies
- With the necessary references and materials

Elements of the Competency

1. Check the written prescriptions for the required information.

2. Create or update patients' records and produce labels for the drugs to be prepared.

Performance Criteria

- Identification of missing, incomplete or inaccurate information
- Gathering of all the information needed to create or update patients' records, prepare drugs and collect payment

- Recording of all required information related to the patient medication profiles, the drugs prescribed and the method of payment
- Accuracy of information recorded in the patient's record, based on data in the prescription
- Observance of specific requirements for a narcotic part-fill prescription
- Account taken of the number of refills and the duration of treatment when deciding to refill a prescription
- Verification of the completeness and accuracy of information recorded on the label
- Immediate consideration of any error messages transmitted by the third-party payer
- Communication of relevant information to the pharmacist at the appropriate time
- Observance of the specific requirements for labelling a weekly pill organizer
- Relevant comments concerning the dosage of certain classes of drugs and the patient's state of health

3. Prepare the drugs and label the containers.
 - Satisfactory preparation of materials and products according to the drugs to be prepared
 - Account taken of the expiry date and information in the prescription when selecting the drug from the shelf
 - Selection of correct preparation method for the type of drug prescribed and its packaging
 - Accuracy of the quantity of drug prepared
 - Cleanliness of container after bottling or packaging
 - Observance of standards related to affixing the label to the container
 - Observance of the established protocol with regard to the selection of auxiliary labels
4. Verify their work, correct any errors and have it verified by the pharmacist.
 - Conformity of the label with the information in the prescription
 - Conformity of the information on the label with the drug prepared
5. Present the drug and receipt to the patient and, if necessary, explain the receipt to the patient.
 - Follow-up of prescription filled, depending on the situation
 - Presentation to patient of receipts for all drugs prepared
 - Relevance of explanations provided to patient with regard to billing
 - Accuracy of responses to billing questions
6. File the prescriptions.
 - Observance of established filing system
 - Account taken of the specific requirements of filing prescriptions for narcotics and controlled drugs
7. Clean and store the materials and products used.
 - Cleanliness of materials before and after use
 - Storage of drugs in a timely manner and according to the established system
 - Proper storage of materials used

For the competency as a whole:

- Observance of general preparation procedure
- Observance of hygiene and safety rules
- Time-saving, efficient organization of work
- Drug prepared and label in conformity with the information in the prescription
- Observance of established time limits for dispensing

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

Knowledge, skills, attitudes and perceptions related to all elements.

- Make optimal use of the keyboarding technique. Maintenance and acceleration of typing speed
 - Follow the instructions from the pharmacist with regard to the verification procedure to use when filling a prescription.
 - Recognize the most common errors made when filling a prescription and take precautions against them. Document entitled *Prévenir et gérer les erreurs relatives à la médication en pharmacie*, published by the Québec Order of Pharmacists
1. Verify the prescriptions.
 - Check to ensure that all legally prescribed information is present. Legal provisions related to prescriptions (right to prescribe, content of patients' records, content of prescriptions, validation criteria, etc.)
 - Be familiar with the terminology of parenteral and non-parenteral drugs. Common and brand names, dosage forms, concentration and routes of administration
 - Identify administrative information concerning the method of payment. Patient's medical insurance
 - Solve problems related to missing information. Dialogue with patient
Consultation of patient's record
Communication with insurer
 2. Create or update patients' records and produce labels for the drugs to be prepared.
 - Observe the specific requirements of dispensing narcotics, controlled drugs and targeted substances. Legal provisions related to the control of narcotics, controlled drugs and targeted substances
Part-fill prescriptions
 - Consider the method of payment when inputting the information in the prescription. Organizations that play the role of third-party payer: the RAMQ and private insurance companies
 - Perform calculations related to the prescription. Dosage, quantity, duration of treatment
 - Verify the accuracy and completeness of the information on the label. Legal provisions related to the labelling of drugs and poisons
Distinction between the actual expiry date of a drug sold and the expiry date established by the manufacturer

- Recognize the importance of comments concerning the dosage of certain drugs and the patient's state of health.
 - Include all the required information when preparing a weekly pill organizer. Characteristics and purpose of a pill organizer
3. Prepare the drugs and label the containers.
- Observe hygiene and safety rules related to the handling of drugs. Non-sterile preparations
Specific requirements of storing certain drugs
 - Demonstrate organization, efficiency and accuracy in their work. Methods for quickly counting tablets and capsules
Correct association of the label with the drug prepared
 - Affix an auxiliary label. Choice of label according to the pharmacist's established protocol
4. Verify their work, correct any errors and have it verified by the pharmacist.
- Ensure that the drug prepared and label produced conform to the information in the prescription. Concept of medication container content verification
Types of errors possible and their degree of seriousness
Measures to prevent errors
Effective verification procedure
 - Ensure that the third-party payer will assume responsibility for payment. Most common error messages issued by third-party payers
Resolution of administrative problems that fall within the mandate of pharmacy technical assistants
 - Recognize the importance of having their work verified by the pharmacist. Professional liability
5. Present the drug and receipt to the patient and, if necessary, explain the receipt to the patient.
- Explain the terms and conditions of the Québec drug insurance plan. Deductible, co-insurance, maximum contribution, premium
Exception drugs
The RAMQ drug formulary for community pharmacies
 - Identify the methods used in community pharmacies to establish the cost of insured drugs. Best available price and actual cost, usual and customary prices
 - Communicate with the patient. Clarity of information
Communication skills
Respect for various types of customers

7. Clean and store the materials and products used.

- Follow the hygienic techniques related to the maintenance of materials.

Module 10 Duration 60 hours

Behavioural Objective

Statement of the Competency

To apply concepts related to parenteral drugs.

Achievement Context

- Working with commonly prescribed parenteral drugs
- Taking into account the legal and therapeutic classifications of drugs used by the RAMQ

Elements of the Competency

1. Identify the class or subclass of commonly prescribed parenteral drugs.
2. Associate the brand names of common parenteral drugs with their common names.
3. Associate common parenteral drugs with their dosage forms and formats.
4. Identify the concentration of active ingredients in common parenteral drugs.
5. Identify the routes and methods of administration of parenteral drugs.
6. Identify the specific procedures for storing various types of parenteral drugs.

Performance Criteria

- Identification of the legal class of drugs according to the extent to which they are controlled
- Identification of the therapeutic class or subclass of drugs
- Association of a drug's brand name or names with its common name
- No spelling errors when writing common and brand names
- Association of each drug presented with its dosage forms
- Association of each drug presented with its formats, based on volume
- Identification of the concentration of active ingredients for each drug presented
- Identification of each route and method of administration for a variety of drugs
- Identification of abbreviations used for each parenteral route of administration
- Account taken of the manufacturer's instructions, the regulations regarding the storage of drugs and the established storage system

For the competency as a whole:

- Use of correct terminology
- Accurate identifications and associations

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

1. Identify the class or subclass of commonly prescribed parenteral drugs.
 - Distinguish a parenteral drug from a non-parenteral drug. Methods of drug administration

2. Associate the brand names of common parenteral drugs with their common names.
 - Distinguish between a drug's brand name and its common or generic name.
 - Consult the RAMQ drug formulary
 - Correctly spell the common and brand names of a drug.

3. Associate common parenteral drugs with their dosage forms and formats.
 - Distinguish among the most common dosage forms of parenteral drugs, their characteristics and the abbreviations used to represent them. The RAMQ drug formulary
Main characteristics of each small volume and large volume format
Single-dose vial and multi-dose vial

4. Identify the concentration of active ingredients in common parenteral drugs.
 - Explain the difference between a drug's dosage, quantity and format.
 - Calculate the final concentration of a parenteral drug. Use of units of measure

5. Identify the routes and methods of administration of parenteral drugs.
 - Identify the most common parenteral routes of administration, their characteristics and the abbreviations used for each route. The RAMQ drug formulary
 - Distinguish among the various methods of administering parenteral drugs. Most commonly used devices and accessories for administering parenteral drugs
 - Follow health care establishment protocols and drug administration guides.

Module 11 Duration 30 hours

Situational Objective

Statement of the Competency

To communicate in the workplace and work in a team.

Elements of the Competency

During this module, the students will:

- Become familiar with the basic elements of communication.
- Become familiar with the aspects of communication specific to pharmacy technical assistants.
- Become familiar with the principles and techniques of working in a team.
- Evaluate their ability to communicate and work in a team.

Learning Context

Information Phase

- Learning about the various elements of communication in connection with the following: communication process, types of communication, communication aids, obstacles to communication and qualities of communication.
- Learning about the phenomenon of perception (people and things) and how it affects situations involving communication.
- Learning about the aspects of communication specific to pharmacy technical assistants in connection with the following: role in greeting and directing customers, topics of conversation appropriate for the type of person involved in the communication, types of communication appropriate for the type of customer and limits to observe when communicating.
- Decoding the non-verbal signs of feelings often experienced by pharmacy customers such as shyness, nervousness, worry, satisfaction, aggression and dissatisfaction.
- Learning about the aspects of teamwork specific to a pharmacy in connection with the following: composition of teams in retail pharmacies and health care establishment pharmacies, tasks carried out as a team, responsibilities of team members, ways of becoming part of an existing team, ways of reducing friction within a team, procedure to follow to solve a problem and ways of ensuring continuity of work from one team to another.

Participation Phase

- Experimenting with communication strategies alone, in a team and in a group.
- Evaluating their communication skills in connection with the following: clearness of language, accuracy of message, use of correct terminology, tone of voice, speed of delivery and attitude.
- Experimenting with various verbal communication techniques such as questioning, listening, reformulating and transmitting a message from one person to another.
- Experimenting with various non-verbal communication techniques such as look, touch, silence, body language, personal space and conflicting verbal and non-verbal messages.
- Learning about ways of approaching people in various situations: aggressive people, people with physical handicaps or cognitive deficiencies, people who are unfamiliar with the language, and worried or nervous people.

Synthesis Phase

- Discussing an experience of working as a team in connection with the following: type of group, needs of the group, position or role of each group member and conditions for successful teamwork.
- Summarizing an activity emphasizing the importance of cooperation and negotiation of tasks, the workspace and the duration of participation in effective teamwork.
- Identifying their communication style and ability to cooperate with regard to teamwork and the roles played in a group.
- Summarizing their strengths and weaknesses with respect to communication and teamwork and the impact of their strengths and weaknesses on their future exercise of the occupation, recently acquired learning, ways of improving their communication skills and their ability to work in a team.
- Presenting the summary to the teacher for discussion and joint evaluation.

Instructional Guidelines

The teacher should:

- Provide students with the materials needed to carry out the activities.
- Create a climate that stimulates students' interests by using appropriate leadership techniques.
- Encourage all students to express their opinions and engage in group activities and discussions.
- Lead class discussions.
- Provide support during group activities.
- Correct errors as they arise, clarify points to ensure that students understand and provide additional information as needed.
- Ensure that the examples used and hypothetical situations created are representative of pharmacy workplaces.
- Assist students with their evaluation and help them find ways of improving.

Participation Criteria

Information Phase

- Participate seriously in the activities.
- Participate actively in class discussions.
- Gather information on most of the topics covered.

Participation Phase

- Participate actively in class discussions.
- Participate seriously in the activities.
- Share their observations after each activity and role-play.

Synthesis Phase

- Participate seriously in the activities.
- Produce the required assignment.
- Discuss their self-evaluation with the teacher.

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the learning context, the elements of the competency related to each phase as well as the instructional guidelines.

Information Phase

- Interpret interactions between individuals or groups of individuals.
- Identify the relevant information in situations involving communication in the workplace.

Participation Phase

- Make a positive contribution to the work of a team. Cooperation, initiative, adaptation
- Adapt to various situations involving communication. Level of language and quality of written and spoken language; non-verbal language; consideration of the other person
- Show respect, tolerance and open-mindedness.

Synthesis Phase

- Relate their behaviour during situations involving communication at school to their behaviour during situations involving communication in the workplace.

Module 12 Duration 15 hours

Situational Objective

Statement of the Competency

To take occupational health and safety precautions.

Elements of the Competency

During this module the students will:

- Become familiar with the legal provisions related to occupational health and safety in pharmacy technical assistance.
- Become familiar with the risks inherent in the occupation and the associated precautions.
- Learn the procedure to follow in case of accident.
- Evaluate their behaviour in terms of prevention.
- Use the procedure guides related to the exercise of the occupation.

Learning Context

Information Phase

- Learning about the provisions of the *Act respecting occupational health and safety* related to the occupation of pharmacy technical assistant.
- Identifying risk factors inherent in the occupation and the appropriate precautions for avoiding them.
- Becoming familiar with the most common hazardous materials used in pharmacies and understanding the meaning of the pictograms on the containers holding these materials.
- Learning about the risks and precautions related to the handling of cytotoxic drugs.
- Learning the procedure to follow in dangerous situations involving cytotoxic drugs (e.g. spilling the drug, contaminated clothing or flow hood, and reception of damaged goods).

Participation Phase

- Through concrete examples, illustrating situations likely to arise in pharmacy that justify legal recourse.
- Participating in a discussion about stress, its sources, its most common signs and its effects on a person's health and work.
- In a hypothetical situation, identifying the elements or circumstances considered health and safety risk factors.
- Participating in a discussion of the most common workplace accidents.
- In a hypothetical situation, taking precautions or following a procedure in the event of various common workplace accidents.

Synthesis Phase

- Taking stock of their behaviour during daily activities with respect to health and safety and noting ways of improving it.
- Making associations between their behaviour in daily life with respect to health and safety and the risks involved in working in community pharmacies and health care establishment pharmacies.

Instructional Guidelines

The teacher should:

- Provide students with the references and materials needed to carry out the activities.
- Determine in advance the duration of each activity, inform the students of it and respect it.
- Direct the students' research and help them understand the *Act respecting occupational health and safety* by giving concrete examples.
- Provide appropriate support during group activities.
- Plan and lead class discussions.
- Encourage all students to express their opinions.
- Ensure that the examples used and hypothetical situations created are representative of the various workplaces.
- Correct errors as they arise during discussions and provide additional information as needed.

Participation Criteria

Information Phase

- Gather information on various provisions of the *Act respecting occupational health and safety*.
- Participate actively in class discussions.
- Participate seriously in the activities.
- Gather information on the topics discussed.

Participation Phase

- Participate actively in the discussion.
- Note the results of their research.
- Participate seriously in the activities.

Synthesis Phase

- Produce a serious evaluation of their behaviour in terms of prevention.
- Be willing to discuss the results of their self-evaluation with the teacher.

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the learning context, the elements of the competency related to each phase as well as the instructional guidelines.

Information Phase

- Use the procedure guides related to the exercise of the occupation.
- Recognize the importance of the *Act respecting occupational health and safety*.

Participation Phase

- Anticipate situations involving risk factors.
- Take appropriate precautions.
- React to situations by following established procedures.

Synthesis Phase

- Relate health and safety standards to their personal behaviour.

Module 13 Duration 90 hours

Behavioural Objective

Statement of the Competency

To apply customer service and inventory management techniques.

Achievement Context

- While serving a customer
- During a telephone conversation with a customer
- In accordance with the task to be performed
- Using the procedure employed at the establishment
- With appropriate references and materials
- With the required pharmaceutical products and drugs

Elements of the Competency

Performance Criteria

1. Greet customers and answer the telephone.

- Observance of greeting procedure
- Observance of telephone etiquette
- Respectful and courteous attitude
- Observance of a triage procedure when selling non-prescription medicine
- Answers appropriate to requests and limits of their position:
 - request for information about the drug caution code
 - request for delivery
 - request to fill a prescription
- Use of clear, accurate language and an approach appropriate for the type of customer
- Discretion during discussions with customers

2. Deliver various types of services.

- Provide information related to the use of prescription accessories for diabetic self-care.
 - Perform a pregnancy test.
 - Adjust medical devices and accessories and provide information on their adjustment and use.
- Relevance of information provided
 - Use of clear, accurate language adapted to the type of customer
 - Satisfactory performance of pregnancy test
 - Adoption of precautions and hygienic measures appropriate for the performance of a pregnancy test
 - Proper adjustment of medical devices and accessories

- Take a patient's blood pressure.
- Satisfactory reading of blood pressure
- Appropriate answers to requests, based on the limits of their position
- 3. Operate a cash register and prepare deposit slips.
- Satisfactory opening operations
- Satisfactory current operations
- Satisfactory closing operations
- Accuracy of information recorded on deposit slip
- 4. Place an order, receive merchandise, price it and display it.
- Satisfactory assessment of products to be ordered based on needs and established policies
- Satisfactory identification of the manufacturer's code of each product to be ordered
- Appropriate inputting of information, based on the machine and inventory software
- Observance of procedure for receiving merchandise
- Correct use of method for verifying expiry dates
- Correct determination of follow-up in case of claims and returns
- Proper pricing of each product
- Proper displaying of merchandise according to the system used and stock rotation
- Determination of appropriate measures for removing expired products from shelves
- 5. Apply the inventory maintenance procedure.
- Methodical check of expiry dates
- Return of expired medications
- Observance of required minimum and maximum quantities
- Relevance of orders suggested

For the competency as a whole:

- Observance of rules of professional ethics
- Satisfactory application of communication techniques
- Satisfactory application of customer service and inventory management techniques
- Ability to adapt to various types of customers and unforeseen events
- Observance of established customer service and inventory management policies
- Satisfactory prioritization of tasks to be performed

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

1. Greet customers and answer the telephone.

- Apply customer service principles and policies.
 - Procedure for greeting customers
 - Attitudes encouraging customers' trust
 - Rules of professional ethics
 - Respectful language in communications with customers

- Talk on the telephone.
 - Functions of a multi-line telephone
 - Nature of telephone calls that pharmacy technical assistants in community and health care establishment pharmacies are generally required to take
 - Rules to follow when receiving and transferring telephone calls
 - Gathering of all the information required

- Follow the steps of a procedure to determine which patients should be referred to the pharmacist for assistance with non-prescription medication.
 - Legal provisions governing the sale of non-prescription medication: delegated acts; schedules in the *Terms and conditions for the sale of medications*; drug caution code
 - Directing of customers to various pharmacy aisles
 - Referral to the pharmacist

2. Deliver various types of services.

- Provide information related to the use of prescription accessories for diabetic self-care.
 - Definition of diabetes, glycemia and glycosuria
 - Main components of the prescription accessories most commonly sold in community pharmacies for diabetic self-care and directions for their use

- Perform a pregnancy test.
 - Rules of hygiene
 - Observance of confidentiality and the limits of the position of pharmacy technical assistant

- Adjust medical devices and accessories and provide information on their adjustment and use.
 - Prescription accessories most commonly sold or rented in pharmacies and their specific uses

- Take a patient's blood pressure.
 - Definition of blood pressure
 - Main components of the various blood pressure monitors used in pharmacies

3. Operate a cash register and prepare deposit slips.

- Apply cash register techniques.

Components of a cash register and their functions
 Identification of the information printed on a cash register tape
 Keyboarding technique for the numeric keypad on the cash register
 Cash balance process

- Perform monetary transactions.

Rules to apply when receiving cash to avoid errors when giving change in coins or bills
 Order in which money should be placed in the till
 Most common methods of payment used in pharmacies
 Handling various denominations of change
 Partial deposit

4. Place an order, receive merchandise, price it and display it.

- Use a supplier's catalogue.

Distinction between a manufacturer and a supplier
 Meaning of information on a supplier's drug list
 Specific features of group purchasing programs negotiated by health care establishment pharmacies for certain products

- Record any pertinent purchases in the registry of narcotics, controlled drugs and targeted substances.

Relevant legal concepts

- Calculate the retail price of a drug or pharmaceutical product on the basis of its cost price.

Use of information printed on the invoice

- Apply display techniques.

Usual methods of displaying merchandise in community and health care establishment pharmacies
 Commonly used means of displaying products to promote sales

5. Apply the inventory maintenance procedure.

- Rotate the stock.

Module 14 Duration 120 hours

Behavioural Objective

Statement of the Competency

To perform tasks related to dispensing in health care establishment pharmacies.

Achievement Context

- Using prescriptions
- With a computer, a printer and applications software for health care establishment pharmacies
- With the necessary references and materials
- With the drugs required

Elements of the Competency

1. Sort the prescriptions received in order of priority.
2. Read the prescriptions, create or update patients' records and produce labels.
3. Prepare and label the drugs.
4. Produce the documents for the nursing and medical staff.

Performance Criteria

- Observance of steps in the process used to get a prescription filled in a health care establishment
- Identification of missing, incomplete or inaccurate information
- Correct steps taken to solve a problem related to the legibility of a prescription
- Proper determination of drug to be prepared
- Recording of all required information in patient's record
- Accuracy of calculations
- Account taken of the specific requirements for producing floor stock medication labels
- Satisfactory preparation of drugs according to the information in the prescription or requisition
- Observance of drug packaging methods:
 - traditional packaging
 - single doses in blister packages
- Accuracy of the quantity prepared based on the information in the prescription and the period of validity
- Observance of labelling standards
- Production of each document requested
- Recording of all required information in each document
- Update of patient's record
- Correct number of documents produced
- No errors
- Observance of the cycle for refilling resident patient prescriptions

5. Verify their work and correct any errors.
 - Conformity of the label with the information in the prescription
 - Conformity of the information on the label and in the medication profile with the drug prepared
 - Conformity of the information on the label with the information in the medication profile
 - Communication of relevant information to the pharmacist in a timely manner

6. Perform the medication container content verification for a colleague.
 - Conformity of the drug's name with the name recorded on its container label
 - Pharmacist informed of any errors
 - Correction of any errors found
 - Recording of information in the registry of quality control data

7. Perform the tasks related to the distribution of prescription refills.
 - Satisfactory preparation of prescription refills:
 - pre-packaging of the most often prescribed drugs
 - preparation of prescription refills, including the production of labels and documents for nursing and medical staff
 - arrangement of drugs
 - Correct processing of returned drugs
 - Verification of:
 - expiry date
 - condition of drug
 - conformity of drug and its condition with established list or prescription
 - Proper arrangement of drugs on cart

8. Ensure the availability of stock.
 - Satisfactory verification of stock in:
 - pharmacy stockroom
 - emergency cabinet
 - night cabinet
 - floor stock medication in patient care units
 - Conformity of stocks with established lists
 - Satisfactory recording of data related to inventory management
 - Satisfactory medication container content verification

9. Perform tasks related to the distribution of narcotics, controlled drugs and targeted substances.
 - Completeness and relevancy of the information recorded in the registry and the form intended for nurses
 - Information recorded in a timely manner
 - No errors when data is input
 - Satisfactory inventory control
 - Satisfactory identification and correction of any errors

- | | |
|---|---|
| 10. Arrange the drugs used and file the documents produced. | <ul style="list-style-type: none"> • Arrangement of drugs according to pharmacological classification • Filing of each document in a timely manner and according to established filing system |
| 11. Clean and store the materials and products used. | <ul style="list-style-type: none"> • Cleanliness of materials before and after use. • Proper storage of products and materials |

For the competency as a whole:

- Observance of general preparation procedure
- Observance of established policies, regulations and directives
- Observance of hygiene and safety rules
- Methodical, efficient organization of work
- Conformity of information input with information in prescriptions
- Observance of established time limits for dispensing

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

Knowledge, skills, attitudes and perceptions related to the competency as a whole

- | | |
|---|--|
| <ul style="list-style-type: none"> • Make optimal use of the keyboarding technique. | Maintenance and acceleration of typing speed |
| <ul style="list-style-type: none"> • Use a health care establishment dispensing guide. | Procedure for filling prescriptions in various patient care units
Health care establishment protocol
Health care establishment terminology: stat, on-call, pre-op, post-op
Classes and subclasses of drugs
Common or generic name and brand name of a drug |
| <ul style="list-style-type: none"> • Use the terminology common to health care establishments. | Drug included in the formulary, drug not included in the formulary, restricted drug, drug used for a specific medical purpose, investigational drug and drug prescribed under a protocol, floor stock medication and drug supplied by the patient |
2. Read the prescriptions, create or update patients' records and produce labels.
- | | |
|---|--|
| <ul style="list-style-type: none"> • Verify the inclusion of legally required information. | Legal requirements related to the content of prescriptions and patients' records
Sections of the <i>Pharmacy Act</i> that apply to drug labelling |
|---|--|

- Take into account the specific requirements for labelling drugs in health care establishments. Use of abbreviations and comments
 - Take into account the period of validity of prescriptions in health care establishments.
3. Prepare and label the drugs.
- Take into account the various distribution systems used in health care establishments and the advantages of each.
 - Observe the hygiene and safety rules related to the handling of drugs.
4. Produce the documents for the nursing and medical staff.
- Identify the content and function of each document used.
 - Review the various situations requiring that a patient's record be updated.
5. Verify their work and correct any errors.
- Ensure the conformity of the drug prepared and label produced with the information in the prescription. Concept of medication container content verification
Types of errors possible and their severity
Precautions to prevent errors
Procedure for effective verification
6. Perform the medication container content verification for a colleague.
- Ensure the conformity of the drug prepared and label produced with the information in the prescription. Error management in health care establishments
Quality control program
7. Perform the tasks related to the distribution of prescription refills.
- Prepare prescription refills. Specific requirements related to the content and arrangement of drugs on a cart, taking into account the type of cart and its function (e.g. floor stock medication, unit-dose system, emergency cart)
 - Take into account the specific requirements of distributing drugs to various patient care units.
8. Ensure the availability of stock.
- Manage stock inventory. Types of stock drugs in health care establishments and their uses

9. Perform tasks related to the distribution of narcotics, controlled drugs and targeted substances.

- Observe the specific requirements of distributing narcotics, controlled drugs and targeted substances in health care establishments.
 - Rules governing the recording of narcotics and controlled drugs in the registry
 - Regulation on targeted substances
 - Function of the sheet intended for nurses
 - Procedures for destroying unused narcotics

10. Arrange the drugs used and file the documents produced.

- Observe the procedure for arranging drugs and filing documents in health care establishment pharmacies.

Module 15 Duration 90 hours

Behavioural Objective

Statement of the Competency

To make sterile preparations.

Achievement Context

- Working alone
- At a workstation equipped with a laminar flow hood
- Using prescriptions and their respective labels
- Using pre-established protocols and technical procedures
- With the materials needed to make the required preparations
- Under the direct supervision of the pharmacist

Elements of the Competency

1. Read the prescription and prepare the work.

- Performance of all necessary calculations:
 - quantity of ingredients
 - number of bottles of intravenous solution, if applicable
- Accuracy of calculations, based on the information in the prescription
- Accuracy of the information input and printed on the label
- Presence of all the materials and products for the type of drug to be prepared and the type of flow hood to be used
- Complete verification of the condition of materials and products

2. Use basic techniques for making sterile preparations.

- Correct use of each of the following techniques:
 - insertion of filter between needle and syringe
 - removal of liquid from ampoule and vial
 - reconstitution of a powder within a vial
 - transfer of a solution from a sterile container to a bag or bottle for intravenous liquids
 - transfer of a large volume of parenteral fluid to another sterile container
 - removal of liquid from a Mix-o-Vial
 - extraction of air from the tubing
 - extraction of air from a bag of intravenous fluid

3. Prepare an antibiotic therapy for an elastomeric infusion device or system.

- Proper performance of each step of the technique
- Infusion of liquid into the device
- Extraction of air from the tubing

- | | |
|---|---|
| 4. Add an additive to a parenteral solution. | <ul style="list-style-type: none">• Correct performance of each step of the technique |
| 5. Prepare for parenteral nutrition using half-filled bags. | <ul style="list-style-type: none">• Correct performance of each step of the technique |
| 6. Prepare a cytotoxic drug <i>in a simulation</i> . | <ul style="list-style-type: none">• Correct use of techniques for reconstituting a powder:<ul style="list-style-type: none">– with a hydrophobic filter– under negative pressure• Correct use of techniques for removing liquid from a vial:<ul style="list-style-type: none">– with a hydrophobic filter– under negative pressure• Observance of all safety rules related to the handling of cytotoxic drugs |
| 7. Affix the label to the container. | <ul style="list-style-type: none">• Correct choice of label for the drug prepared• Label affixed to proper location on container |
| 8. Follow the procedure for preparing batches of syringes and syringes of premixed insulin and parenteral solution. | <ul style="list-style-type: none">• Correct performance of the required steps for each preparation• Satisfactory use of multiple-use tubing with and without a valve• Production of labels specific to batch production• Recording in registry of manufacture |
| 9. Fill cassettes to be used with ambulatory infusion pumps. | <ul style="list-style-type: none">• Correct performance of each step of the technique• Injection of a fluid into the cassette• Extraction of air from the cassette and the tube |
| 10. Tidy up the work area and store the products and materials. | <ul style="list-style-type: none">• Cleanliness of materials• Storage of products according to the established method• Proper storage of materials• Disposal of waste according to type of materials |

For the competency as a whole:

- Observance of general preparation procedure
- Observance of established protocols and technical procedures
- Observance of hygienic and aseptic rules
- Observance of safety precautions
- Observance of precautions related to the use of materials and the handling of products
- Conformity of sterile preparations with the information in the prescription and instructions
- Completion of tasks within a time limit appropriate to the type of preparation

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the elements of the competency, the main components of these elements and the performance criteria related to the competency.

1. Read the prescription and prepare the work.

- Identify the various types of sterile preparations generally made in health care establishments.
- Read the prescription to be filled.
- Perform calculations based on the information in the prescription and the products required. Concentration, form
- Use the materials needed for the various preparations and based on the function of each of their components. Characteristics of needles, syringes and filters
Characteristics of devices for administering (tubing), adding to and reconstituting parenteral solutions
- Take the necessary precautions when using glass and handling needles.
- Use the terminology related to the types of preparations and quality standards. Types of preparations: perfusion time, hourly flow rate, drops per minute, micro-drip and macro-drip
Quality standards: sterility, turbidity, viscosity, absence of particles, apyrogenic, pH and stability of a product
- Identify the main signs of incompatibility between products in a mixture.
- Apply the necessary hygienic and aseptic measures when preparing sterile drugs.

2. Use basic techniques for making sterile preparations.
 - Distinguish among the main diluents used in the reconstitution of sterile drugs and their characteristics.
 - Observe the appropriate time limit for the type of preparation.

3. Prepare an antibiotic therapy for an elastomeric infusion device or system.
 - Distinguish among the various types of infusion devices and their main characteristics. Function of an elastomeric infusion device
Main antibiotics used with this device

4. Add an additive to a parenteral solution.
 - Distinguish among the main types of solutions and additives used in health care establishment pharmacies.

5. Prepare for parenteral nutrition using half-filled bags.
 - Read a prescription for parenteral nutrition. Most common abbreviations used to denote parenteral nutrition
 - Identify the main characteristics of stock solutions used in parenteral feeding.
 - Identify the most commonly used additives in parenteral nutrition.
 - Review the importance of adding ingredients in a specific order according to the substances or solutions used in parenteral nutrition.
 - Distinguish among the various methods of preparing a parenteral nutrition solution. Manual preparation
Preparation using automated pumps

6. Prepare a cytotoxic drug *in a simulation*.
 - Identify the risks involved in handling cytotoxic drugs and the precautions to take to avoid affecting one's health.
 - Use negative pressure. Role in the preparation of cytotoxic drugs
 - Identify what is called a hydrophobic filter. Role in the preparation of cytotoxic drugs
 - Follow the procedures for cleaning a cytotoxic spill.

8. Follow the procedure for preparing batches.
 - Distinguish among the various production methods. Batch production, manual and automated
 - Identify the importance of following the procedures related to recording and defining the shelf life of products prepared in batches.

9. Fill cassettes to be used with ambulatory infusion pumps.
 - Distinguish among the various types of infusion devices and their main characteristics. Most common drugs used with ambulatory infusion pumps

Module 16 Duration 15 hours

Situational Objective

Statement of the Competency

To plan a job search.

Elements of the Competency

During this module the students will:

- Become familiar with the steps involved in planning a job search.
- Prepare a résumé and cover letter.
- Become familiar with techniques for preparing and undergoing a job interview.

Learning Context

Information Phase

- Learning about the steps involved in planning a job search.
- Learning about specific aspects of the job search in pharmacy (e.g. types of establishments, how to target organizations, who to contact, job requirements).
- Discussing means and attitudes that contribute to the success of the job search.

Participation Phase

- Learning about the key elements and qualities of a résumé and cover letter.
- Comparing various model résumés and cover letters.
- Working individually, preparing a résumé and cover letter.
- Learning about what happens during a job interview and noting the steps involved in preparing for this type of interview.
- Participating in preparing and carrying out a simulated job interview with an employer.

Synthesis Phase

- Submitting their résumé and cover letter to the teacher.
- Identifying the attitudes and behaviours to be adopted or avoided during a job interview and the steps to be taken after a job interview.
- Analyzing their performance during the simulated interview and discussing it with the teacher.

Instructional Guidelines

The teacher should:

- Provide the students with relevant reference material.
- Lead class discussions.
- Encourage students to participate and express their opinions.
- Organize the simulated job interviews and provide students with support.
- Promote a serious and respectful attitude during presentations and evaluations.
- Encourage self-evaluation.

Participation Criteria

Information Phase

- Note the main steps involved in planning a job search.
- Participate seriously in discussions.

Participation Phase

- Participate actively in discussions.
- Show diligence in the preparation of their résumé and cover letter.
- Participate seriously in the evaluation of the documents prepared.

Synthesis Phase

- Note the steps to be taken before undergoing a job interview.
- Participate seriously in the simulated job interview.
- Participate actively in class discussions.
- Seriously evaluate their performance during the job interview.

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the learning context, the elements of the competency related to each phase as well as the instructional guidelines.

Information Phase

- Recognize how the competency relates to the overall program.

Participation Phase

- Define the purpose of a résumé and cover letter, their respective contents and the important points/features they should contain.
- List the documents that should accompany a résumé.
- Review the importance of using appropriate vocabulary and correct English in résumés and cover letters.
- Review the importance of verbal and non-verbal language during a job interview.
- Adapt their job search to the specific requirements of the targeted workplace. Community and health care establishment pharmacies

Synthesis Phase

- Relate the simulated job search to their actual job search goals.

Module 17 Duration 75 hours

Situational Objective

Statement of the Competency

To perform occupational tasks in an extended care facility.

Elements of the Competency

During this module, the students will:

- Become familiar with the physical and functional organization of the pharmacy department.
- Perform occupational tasks characteristic of this type of establishment, under supervision and alone.
- Evaluate their participation in the practicum.

Learning Context

Information Phase

- Meeting the supervising pharmacist and the pharmacy technical assistant.
- Learning about the physical organization of the facility, its general policies, the services offered (e.g. cafeteria, parking) and the functions of the people most likely to come into contact with pharmacy personnel.
- Becoming familiar with how the pharmacy department is organized (e.g. types of rooms, physical layout, personnel) and the way it operates (e.g. procedures, filing system, dispensing policy).
- Learning about the schedule for the coming days and specific instructions for the work to be done.
- Observing the work of the pharmacy technical assistant (i.e. tasks performed, arrangement of materials, products available, distribution system used).
- Learning how to use the computer and software and what procedure to follow when using them.

Participation Phase

- Preparing, under the direct and indirect supervision of the pharmacy technical assistant, floor stock medication according to the requisitions received and drugs for the emergency and night cupboards.
- Verifying an order received from a supplier and informing the pharmacy technical assistant of the conformity or non-conformity of the merchandise and the condition of the goods received; storing the products; recording any narcotics and controlled drugs in the registry and noting expiry dates.
- Performing, under supervision, each of the steps involved in pre-packaging various drugs.
- Participating in the filling of prescriptions by performing the following tasks: counting or measuring the required quantity of drugs; choosing the appropriate containers; packaging the drugs; affixing the labels produced and, if applicable, the auxiliary labels; storing the products and materials used.
- Inputting the data necessary to produce labels and update patients' records daily, under indirect supervision; verifying the accuracy of the information in each document produced.
- Performing, under direct and indirect supervision, the necessary extemporaneous compounding of prescriptions.
- Participating, on at least two occasions, in the following tasks: receiving the cart or drugs returned from a patient care unit; tasks related to the distribution of narcotics and controlled drugs.
- Meeting daily with the supervising pharmacy technical assistant to discuss the tasks performed, new aspects of the job, points to be clarified and ways of improving their performance.
- Answering the telephone daily and providing the requested information, delivering the necessary service or referring the call to the pharmacist.
- Producing daily the various documents required (e.g. patients' records, labels); filing or forwarding the documents produced.
- Performing, according to the established routine, the tasks usually assigned to the pharmacy technical assistant and, if applicable, responding to unforeseen or urgent requests.

Synthesis Phase

- Writing daily in their journal, describing tasks performed and, if applicable, new aspects of the job, pleasant and unpleasant experiences, the difficulties encountered and errors made, and solutions envisioned to solve them.
- Analyzing, on at least two occasions, the quality of their work: professional behaviour; ability to organize their work efficiently; observance of the limits of their position; observance of established policies and instructions; order and neatness; quality of tasks performed; work pace; quality of their communications with pharmacy staff and patient care unit personnel.
- Meeting, on at least two occasions, with the teacher in order to convey the contents of their journal and the results of their self-evaluation for each of the aspects mentioned above.
- Meeting, on at least two occasions during the practicum, with the supervising pharmacist or pharmacy technical assistant, in order to discuss the work done and verify his or her degree of satisfaction with respect to their attainment of the objective.
- At the end of the practicum, meeting with the teacher to discuss their participation in the practicum.
- Participating in a class discussion of their experience during the practicum.

Instructional Guidelines

The teacher should:

- Provide each student with a follow-up chart including all the aspects on which the students must evaluate themselves during the practicum.
- Obtain the cooperation of all the people involved in supervising the practicum and clarify the terms and conditions of the practicum as well as individual responsibilities, specifically with respect to evaluation.
- Organize follow-up meetings and inform students of the times fixed for these meetings.
- Ensure that the supervising pharmacy personnel provide appropriate support while allowing students to exercise their autonomy.
- Ensure that the schedule made by the supervising pharmacist or pharmacy technical assistant takes into account the objectives of the practicum and the activities of the pharmacy service or department.
- Ensure follow-up of the practicum by gathering the students' comments and observations, as well as those of the supervising pharmacist and pharmacy technical assistant.
- In meetings with students and supervising pharmacists, ensure that the objectives of the practicum are being met.
- In meetings, encourage students experiencing difficulties.
- Ensure that students write regularly in their journal and complete the follow-up chart as requested.
- In meetings with students, discuss the contents of their charts and journals.
- During the class discussion, encourage students to think about their aptitudes for and interest in working in the pharmacy of an extended care facility.

Participation Criteria

Information Phase

- Record the information gathered in their journal as well as their observations regarding the various aspects to be discussed.
- Show good judgment in comments and questions.
- Avoid needlessly disturbing the work of pharmacy staff when observing.

Participation Phase

- Follow instructions related to the performance of activities and the organization, terms and conditions of the work.
- Adopt a positive attitude toward comments.
- Be willing to adapt to change and new situations.
- Show an interest in improving the quality of their work.
- Follow instructions related to the performance of their duties.
- Show diligence in performing the tasks.
- Show diligence in observing the rules of hygiene and professional ethics.
- Show initiative and resourcefulness.
- Show diligence in establishing appropriate working relationships.
- Write in their daily journal as requested.

Synthesis Phase

- Write in their daily journal as requested.
- Complete their follow-up chart as requested.
- Participate seriously in the scheduled meetings.
- Adopt a positive attitude toward comments.
- Suggest ways of improving.
- Participate actively and seriously in the class discussion of their experience during the practicum.

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the learning context, the elements of the competency related to each phase as well as the instructional guidelines.

Information Phase

- State the purpose of an extended care facility and the types of patients it serves. Nursing home, extended care facility: types of patients and types of services
- Become familiar with the primary tasks and specific characteristics of the work of pharmacy technical assistants in extended care facilities.
- Become familiar with the objective of the practicum and its terms and conditions.
- Identify the purpose of the daily journal and the importance of using it to record relevant information.
- Describe the behaviour to adopt in the workplace. Attitudes
Rules of hygiene
Rules of professional ethics
Legal provisions related to the occupation
Health care establishment dispensing policies and regulations

Participation Phase

- Become part of the work team. The establishment's work policies and regulations
Communication techniques and principles for working in a team
Personal organization: time management, punctuality, attendance
- Keep a daily journal recording the tasks performed during the practicum. List of observations
Nature and frequency of tasks
Relationship with other staff members
- Work to constantly improve their knowledge. Interest and curiosity
Adaptation to new situations
Information gathering
Performance of tasks
Appropriate work pace

Synthesis Phase

- Analyze their practicum experience.
 - Personal analysis
 - Discussion with other student trainees
 - Meeting with supervising pharmacist
- Relate their workplace experience to the knowledge acquired during the training program.
- Discuss the accuracy of their perception of the occupation both before and after the practicum.

Module 18 Duration 105 hours

Situational Objective

Statement of the Competency

To perform occupational tasks in a community pharmacy.

Elements of the Competency

During this module, the students will:

- Become familiar with the physical and functional organization of pharmacies in general and the prescription counter in particular.
- Perform various occupational tasks under the supervision of a pharmacy technical assistant.
- Perform occupational tasks autonomously.
- Evaluate their participation in the practicum.

Learning Context

Information Phase

- Establishing contact with the supervising pharmacist and introducing themselves; meeting the supervising pharmacy technical assistant.
- Touring the various work areas and meeting the staff; learning about the functions of each person presented in order to establish effective communications with customers and various staff members.
- Becoming familiar with the pharmacy's policies and specific conventions (e.g. work schedules, business hours, dress code, meal times, behaviour with customers); learning about the schedule for the coming days.
- Becoming familiar with the layout of the pharmacy and the arrangement of work materials on the counter; learning the location of the area reserved for the materials needed to perform tasks and the type of filing system used for drugs and documents.
- Observing, in the various sections of the pharmacy other than the prescription counter, the layout of pharmaceutical products in order to effectively direct customers to what they are looking for.
- Observing the pharmacy technical assistant's methods of organizing and performing various tasks, his or her way of using equipment, techniques for approaching customers and his or her way of obtaining information and directing customers to the appropriate individuals or aisles.

Participation Phase

- Operating the cash register and using the printer for credit and debit card payments.
- Participating daily in tasks related to the preparation of drugs.
- Greeting customers, gathering any necessary information, if applicable, directing them to the appropriate services or to the individuals most likely to be able to serve them.
- Making and answering telephone calls daily, responding to requests or, if necessary, referring them to the pharmacist.
- Using the computer daily and recording information related to patients' records and prescriptions in the proper fields; having the accuracy of the information recorded verified and producing labels and receipts.
- Participating in receiving orders, verifying the merchandise, labelling and storing products and returning expired products or products not ordered.
- With the help of the pharmacy technical assistant, making a list of the merchandise to be ordered from a supplier and placing the order.
- Performing the extemporaneous compounding of prescriptions and recording the information in the patient's record.
- Performing the tasks related to dispensing at least ten prescriptions per day for five days.
- At busy times, responding to customer requests and performing a series of tasks while establishing priorities.
- Meeting regularly with the pharmacy technical assistant to discuss the tasks and activities carried out, aspects not understood and ways of improving their performance or behaviour with customers.

Synthesis Phase

- Writing daily in their journal, describing tasks performed and, if applicable, new aspects of the job, pleasant and unpleasant experiences, the difficulties encountered and errors made, and solutions envisioned to solve them.
- Analyzing, on at least three occasions, their participation in the practicum with regard to the following aspects: professional behaviour, quality of communications with customers and staff, ability to perform tasks, attendance, ability to accept comments and criticisms, ability to adapt to different work methods and new situations, ability to use acquired knowledge and skills, and observance of hygiene and safety rules, established policies and instructions; noting the results of these analyses in their follow-up charts.
- Meeting, on at least three occasions, with the teacher in order to convey the contents of their journal and the results of their self-evaluation for each of the aspects mentioned above.
- Meeting, on at least two occasions during the practicum, with the supervising pharmacist in order to discuss the work done and verify his or her degree of satisfaction with respect to their attainment of the objective.
- At the end of the practicum, meeting with the teacher to discuss their participation in the practicum.
- Participating in a class discussion of their experience during the practicum.

Instructional Guidelines

The teacher should:

- Provide each student with a follow-up chart including all the aspects on which the students must evaluate themselves during the practicum.
- Obtain the cooperation of all the people involved in supervising the practicum and clarify the terms and conditions of the practicum as well as individual responsibilities, specifically with respect to evaluation.
- Organize follow-up meetings and inform students of the times fixed for these meetings.
- Ensure that the schedule made by the supervising pharmacist or pharmacy technical assistant takes into account the objectives of the practicum and the activities of the pharmacy.
- Ensure that the supervising personnel provide appropriate support while allowing students to exercise their autonomy.
- In meetings with students and supervising pharmacists and pharmacy technical assistants, ensure that the objectives of the practicum are being met.
- Ensure follow-up of the practicum by gathering the students' comments and observations, as well as those of the supervising pharmacist and pharmacy technical assistant.
- In meetings, encourage students experiencing difficulties.
- Ensure that students write regularly in their journal and complete the follow-up chart as requested.
- During the class discussion, encourage students to think about their aptitudes for and interest in working in a community pharmacy.

Participation Criteria

Information Phase

- Record the information gathered in their journal as well as their observations regarding the various aspects to be discussed.
- Show tact and discretion when observing the work of the pharmacy technical assistant.

Participation Phase

- Follow instructions related to the performance of activities.
- Show availability and resourcefulness.
- Show diligence in observing pharmacy policies.
- Make an effort to do good work.
- Show flexibility toward changes and unforeseen events.
- Apply communication techniques.
- Adopt a positive attitude and an open mind in discussions.
- Show diligence in performing the assigned tasks.
- Show diligence in observing the rules of hygiene and professional ethics.
- Show good judgment in setting priorities.
- Show a sense of organization and progress in the performance of tasks.
- Demonstrate mental concentration when performing the key steps of their work (e.g. calculation of drugs, inputting of information).

Synthesis Phase

- Write in their daily journal the relevant points for their meeting with the teacher.
- Complete their follow-up chart as requested.
- Participate seriously in the scheduled meetings.
- Discuss seriously the results of their self-evaluation.
- Adopt a positive attitude toward comments.
- Suggest ways of improving.
- Participate actively and seriously in the class discussion of their experience during the practicum.

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the learning context, the elements of the competency related to each phase as well as the instructional guidelines.

Information Phase

- Become familiar with the objective of the practicum and its terms and conditions.
- Compare the organization and operations of each type of community pharmacy. Chains, franchises, independents
- Take steps to find a practicum position. Making contact
Presentation of application
Forms to complete
- Describe the behaviour to adopt in a community pharmacy. Attitudes
Rules of hygiene
Rules of professional ethics
Legal provisions related to the occupation
Dispensing policies and regulations in community pharmacies
Internal policies and the professional image of the pharmacy
- Become familiar with the specific characteristics of the various software programs used in community pharmacies.
- Become familiar with the difficult situations likely to arise in community pharmacies and ways of reacting to them.

Participation Phase

- Become part of the work team.
 - The establishment's work policies and regulations
 - Communication techniques and principles for working in a team
 - Customer service
 - Personal organization and judgment: time management, setting priorities, punctuality, attendance and respect for the organization already in place

- Keep a daily journal recording the tasks performed during the practicum.
 - List of observations
 - Nature and frequency of tasks
 - Relationship with other staff members
 - Relationship with customers

- Work to constantly improve their knowledge.
 - Interest and curiosity
 - Adaptation to new situations
 - Information gathering
 - Performance of tasks
 - Appropriate work pace

Synthesis Phase

- Analyze their practicum experience.
 - Personal analysis
 - Discussion with other student trainees
 - Meeting with supervising pharmacist

- Relate their workplace experience to the knowledge acquired during the training program.

- Discuss the accuracy of their perception of the occupation both before and after the practicum.

Module 19 Duration 105 hours

Situational Objective

Statement of the Competency

To perform occupational tasks in a hospital.

Elements of the Competency

During this module, the students will:

- Become familiar with the physical and functional organization of the pharmacy department.
- Perform occupational tasks characteristic of this type of establishment, under supervision and alone.
- Evaluate their participation in the practicum.

Learning Context

Information Phase

- Establishing contact with the supervising pharmacist and pharmacy technical assistant.
- Touring the various areas of the pharmacy department and meeting the people designated to supervise them during the practicum.
- Becoming familiar with the hospital's policies, services offered (e.g. cafeteria, parking, locker room), and specific conventions (e.g. work schedule, meal times, breaks).
- Observing the physical layout of the pharmacy department and its various areas, and the materials used to perform tasks: equipment, tools, accessories and products.
- Observing the following aspects in each area: staff, tasks performed, work method used, filing and storage systems used for documents and drugs, ways of integrating tasks, final result obtained; asking questions on any new aspects observed (e.g. equipment, technique) that relate to occupational tasks.
- Observing the pharmacy technical assistant perform tasks related to sterile preparations, including cytotoxic drugs, and, if applicable, drugs packaged in single-use packets and bulk compounding, paying attention to the following aspects: aseptic and safety precautions taken, method of preparing material, technical process used, verification procedure performed.
- Learning from the supervising pharmacist or pharmacy technical assistant about the work schedule for the coming days with respect to the tasks to be performed.

Participation Phase

- Participating with the designated staff member in the following tasks: restocking floor stock reserves and the emergency and night cupboards, sorting the drugs returned from patient care units or other services.
- Participating in the performance of tasks related to stocking narcotics and controlled drugs in patient care units or other services.
- Participating daily in tasks related to dispensing prescriptions received from outside or within the hospital.
- Performing the extemporaneous compounding of prescriptions and participating in the preparation of intravenous solutions, excluding cytotoxic drugs, under direct and indirect supervision.
- Restocking the reserves (e.g. floor stock medication, emergency and night cupboards) using requisitions or established lists.
- Answering telephone calls and out-patients daily, answering questions that fall under their mandate or referring requests to the pharmacist.
- Performing the tasks related to dispensing at least 50 current prescriptions per day for five days and filing prescriptions, requisitions and other documents.
- Responding to unexpected or emergency requests.
- Meeting daily with the designated staff member to discuss the tasks and activities carried out, new aspects of the job, points to be clarified and ways of overcoming difficulties or improving their performance at work.

Synthesis Phase

- Writing daily in their journal, describing tasks performed, important events and, if applicable, difficulties encountered and solutions found or envisioned to solve them.
- Analyzing, on at least three occasions, their participation in the practicum with regard to the following aspects: professional behaviour, quality of communications with the work team, ability to perform tasks effectively and quickly, ability to integrate and work in a team, observance of rules of hygiene, asepsis and safety and established policies and instructions, ability to adapt to new situations.
- Meeting, on at least three occasions, with the teacher in order to convey the contents of their journal and the results of their self-evaluation for each of the aspects mentioned above.
- Meeting, on at least two occasions during the practicum, with the supervising pharmacist or pharmacy technical assistant, in order to discuss the work done and verify his or her degree of satisfaction with respect to their attainment of the objective.
- At the end of the practicum, meeting with the teacher to discuss their participation in the practicum.
- Participating in a class discussion of their experience during in the practicum.

Instructional Guidelines

The teacher should:

- Provide each student with a follow-up chart including all the aspects on which the students must evaluate themselves during the practicum.
- Obtain the cooperation of all the people involved in supervising the practicum, and clarify the terms and conditions of the practicum as well as individual responsibilities, specifically with respect to evaluation.
- Organize follow-up meetings and inform students of the times fixed for these meetings.
- Ensure that the supervising pharmacy personnel provide appropriate support while allowing students to exercise their autonomy.
- Ensure that the schedule made by the supervising pharmacist takes into account the objectives of the practicum and the activities of the pharmacy service or department.
- Ensure follow-up of the practicum by gathering the students' comments and observations, as well as those of the supervising pharmacist and pharmacy technical assistant.
- In meetings, encourage students experiencing difficulties.
- In meetings with students and supervising pharmacists, ensure that the objectives of the practicum are being met.
- Ensure that students write regularly in their journal and complete the follow-up chart as requested.
- During the class discussion, encourage students to think about their aptitudes for and interest in working in the pharmacy of a general and specialized hospital.

Participation Criteria

Information Phase

- Record the information gathered in their journal as well as their observations.
- Show tact and discretion when observing the work of the pharmacy technical assistant.

Participation Phase

- Follow instructions related to the performance of activities.
- Show diligence in observing the rules of hygiene, asepsis and safety.
- Show diligence in observing established protocols and technical procedures.
- Make an effort to do good work at a good pace, considering their position as student trainees.
- Show autonomy and a sense of organization in performing their tasks.
- Show team spirit in their work.
- Make an effort to adapt quickly to new or urgent situations.
- Write in their daily journal as requested.

Synthesis Phase

- Write in their daily journal as requested.
- Complete their follow-up chart as requested.
- Participate seriously in the scheduled meetings.
- Adopt a positive attitude toward comments.
- Suggest ways of improving.
- Participate actively and seriously in the class discussion of their experience during the practicum.

Suggestions for Competency-Related Knowledge, Skills, Attitudes and Perceptions

The following suggestions take into account the learning context, the elements of the competency related to each phase as well as the instructional guidelines.

Information Phase

- Become familiar with the objective of the practicum and its terms and conditions.
- Distinguish between a general and specialized hospital and an extended care facility. Services offered, types of patients served, etc.
- Compare the organization and operations of the pharmacy department in a general and specialized hospital to those of the pharmacy department in an extended care facility. Parenteral drugs and sterile preparations
Rules of hygiene and asepsis
- Understand the function of an intravenous additive service and a satellite pharmacy. Attitudes
Rules of hygiene
Rules of professional ethics
Legal provisions related to the occupation
Health care establishment dispensing policies and regulations
- Describe the behaviour to adopt in a hospital pharmacy.
- Become familiar with the specific characteristics of the various software programs used in hospital pharmacies.
- Become familiar with the automated systems used in hospital pharmacies. Quality control program
- Learn how to apply medication container content verification procedures in hospitals.

Participation Phase

- Become part of the work team. The establishment's work policies and regulations
Communication techniques and principles for working in a team
Personal organization and judgment: time management, punctuality, attendance and respect for the organization already in place
- Keep a daily journal recording the tasks performed during the practicum. List of observations
Nature and frequency of tasks
Relationship with other staff members
- Work to constantly improve their knowledge. Interest and curiosity
Adaptation to new situations
Information gathering
Performance of tasks
Appropriate work pace

Synthesis Phase

- Analyze their practicum experience.
Personal analysis
Discussion with other student trainees
Meeting with supervising pharmacist
- Relate their workplace experience to the knowledge acquired during the training program.
- Discuss the accuracy of their perception of the occupation both before and after the practicum.
- Relate their experiences during the three practicums to their choice of workplace.
Aptitudes, preferences, interests
Working conditions

