

19

**HEALTH AND
SOCIAL SERVICES**

DENTAL ASSISTANCE

PROGRAM OF STUDY

5644

**EDUCATIONAL and
TECHNICAL
EDUCATION**

Québec 

DENTAL ASSISTANCE

***PROGRAM OF STUDY
5644***

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HEALTH AND SOCIAL SERVICES

DENTAL ASSISTANCE

PROGRAM OF STUDY 5644

The *Dental Assistance* program leads to the
Secondary School Vocational Diploma (SSVD)
and prepares the student to practise the occupation of

DENTAL ASSISTANT

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INTRODUCTION

The *Dental Assistance* program is based on the orientations for secondary school vocational education adopted by the government in 1986. It was designed on the basis of a new framework for developing vocational education programs that calls for the participation of experts from the workplace and the field of education.

The program of study is developed in terms of competencies, expressed as objectives. These objectives are divided into modules, which are organized into teaching blocks. Various factors were kept in mind in developing the program: training needs, the job situation, purposes, goals, and strategies and means used to attain objectives.

The program of study lists the competencies that are the minimum requirements for a **Secondary School Vocational Diploma (SSVD)** for students in both the youth and adult sectors. It also provides the basis for organizing courses, planning teaching strategies, and designing instructional and evaluation materials.

To gain access to the *Dental Assistance* program, students must meet one of the following conditions:

- Hold a Secondary School Diploma
- Be at least 16 years of age and have obtained credits for Secondary IV courses in the language of instruction, second language and mathematics, or have equivalent studies recognized according to sections 232 or 250 of the *Education Act*.

- Be at least 18 years of age and have the functional prerequisites stipulated in section 465 of the *Education Act*.

Nevertheless, because of the requirements of the labour market, preference will be given to persons 18 years old having a secondary school diploma. Admission to this program is limited.

The duration of the program is 1500 hours, which includes 870 hours spent on the specific competencies required to practise the occupation and 630 hours on general competencies. The program of study is divided into 22 modules, which vary in length from 15 to 120 hours (multiples of 15). The time allocated to the program is to be used not only for teaching but also for evaluation and remedial work. The modules are organized into four blocks: the first three of 450 hours each, and the fourth of 150 hours.

This document contains two parts. Part I is of general interest and provides an overview of the training plan. It includes a synoptic table of basic information about the modules, a description of the program training goals, the competencies to be developed and the general objectives, and an explanation of operational objectives. Part II is designed primarily for those directly involved in implementing the program. It contains a description of the operational objectives of each module.

In keeping with this broad approach, three accompanying documents will be provided: a teaching guide, an evaluation guide, and a planning guide.

GLOSSARY

Program Training Goals

Statements that describe the educational aims of a program. These goals are the general goals of vocational education adapted to a specific trade or occupation.

Competency

A set of socioaffective behaviours, cognitive skills or psycho-sensori-motor skills that enable a person to correctly perform a role, function, activity or task.

General Objectives

Instructional objectives that provide an orientation for leading the students to attain one or more related objectives.

Operational Objectives

Statements of the educational aims of a program in practical terms. They serve as the basis for teaching, learning and evaluation.

Module of a Program

A component part of a program of study comprising a first-level operational objective and the related second-level operational objectives.

Credit

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 graduate from a program.

PART I

1. SYNOPTIC TABLE

Number of modules: 22
 Duration in hours: 1500
 Credits: 100

Dental Assistance

Code: 5644

CODE	TITLE OF THE MODULE	HOURS	CREDITS*
754 412	1. The Occupation and the Training Process	30	2
754 424	2. Concepts of Oral Anatomy	60	4
754 433	3. Lesions and Oral Diseases	45	3
754 443	4. Hygiene and Asepsis	45	3
754 452	5. Concepts of Pharmacology	30	2
754 464	6. Oral Treatments	60	4
754 475	7. Dental Materials	75	5
754 482	8. Occupational Health and Safety	30	2
754 492	9. First Aid	30	2
754 503	10. Communication and Teamwork	45	3
754 511	11. Professional Ethics	15	1
754 527	12. Preparation of Materials for Dental Treat-		
754 538	ments	105	7
	13. Chair-side Assistance in Operative Den-	120	8
754 545	tistry		
754 558	14. Administrative Tasks	75	5
754 561	15. Prevention and Treatment-planning Tasks	120	8
	16. Planning a Job Search	15	1
754 578	17. Dental Laboratory Techniques	120	8
754 588	18. Chair-side Assistance: Specialized Dentistry	120	8
754 598	19. Assistance in Operative Dentistry,	120	8
	Orthodontics and Pedodontics		
754 606	20. Assistance in Dental Surgery and	90	6
	Prosthodontics		
754 614	21. Assistance in Endodontics and Periodontics	60	4
754 626	22. Overall Task Performance in a Dental	90	6
	Office		

* 15 hours = 1 credit

The dotted line indicates the end of a block of 450 hours.

This program leads to a Secondary School Vocational Diploma in Dental Assistance.

2. PROGRAM TRAINING GOALS

The training goals of the *Dental Assistance* program are based on the general goals of vocational education and take into account the specific nature of the occupation. These goals are:

To develop effectiveness in the practice of the occupation of dental assistant.

- To teach students to perform tasks and activities associated with the occupation correctly, at an acceptable level of competence for entry into the job market.
- To prepare students to perform satisfactorily on the job by fostering the following skills and attitudes:
 - the observance of instructions, protocols and methods;
 - the ability to apply competently the techniques of the occupation;
 - the ability to communicate adequately with clients and with other members of the dental team;
 - a constant awareness of dangers related to errors and lack of vigilance in the performance of tasks;
 - the ability to adapt to unforeseen situations;
 - the observance of principles of hygiene and asepsis, as well as all rules related to occupational health and safety in the workplace.
 - the observance of the guidelines of professional ethics.

To ensure integration into the working world.

- To familiarize students with the job market in the field of dental care.

- To familiarize students with the rights and responsibilities that are a part of the occupation.

- To give students an understanding of the role of dental assistants and the limits of their duties.

- To foster a gradual integration into the job market.

To foster the development of professional knowledge.

- To foster a basic understanding of the principles underlying the tasks to be performed.
- To help students acquire sound work methods and a sense of discipline.
- To help students develop initiative, a sense of responsibility and an appreciation of work well done.
- To help students develop the habit of self-evaluation.
- To help students develop a desire to inform themselves about everything related to the occupation.

To ensure job mobility.

- To develop a positive attitude toward change and new situations.
- To help students develop the skills required to perform tasks in various occupational situations.
- To prepare students for a creative job search.

3. COMPETENCIES

The competencies to be developed in the *Dental Assistance* program are shown in the grid of learning focuses on the following page. The grid lists general and specific competencies as well as the major steps in the work process.

General competencies involve activities common to several tasks or situations. They cover, for example, the technological or scientific principles that the students must understand to practise the trade or occupation. Specific competencies focus on tasks and activities that are of direct use in the trade or occupation. The work process includes the most important steps in carrying out the tasks and activities of the trade or occupation.

The grid of learning focuses shows the relationship between the general competencies 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 (○) indicates a correlation between a general and a specific competency.

The symbols (Δ) and (●) indicate that these relationships have been taken into account in the formulation of objectives intended to develop specific competencies related to the trade or occupation.

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 of the grid shows the competencies directly related to the practice of a specific trade or occupation. These competencies are arranged in a relatively fixed order; therefore, the modules should be taught, insofar as possible, in the order represented on the grid. The modules including the general competencies 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 LEARNING FOCUSES		FIRST-LEVEL OPERATIONAL OBJECTIVES	DURATION (IN HOURS)	WORK PROCESS (major steps)								GENERAL COMPETENCIES (Technology, personal development, etc.)												TOTALS			
				Understand details of a case or instructions about it	Plan one's work	Prepare the work area and materials	Greet the client	Perform tasks related to treatment	Complete the dental record	Offer advice to clients	Arrange for follow-up treatment	Maintain materials, equipment and work areas	Apply concepts of oral anatomy	Apply concepts related to lesions and oral diseases	Apply principles and procedures of hygiene and asepsis	Apply concepts of pharmacology	Apply concepts related to oral treatments	Apply concepts related to dental materials	Take occupational health and safety precautions	Apply first-aid techniques	Communicate in the workplace and work in a team	Observe the rules of professional ethics	Prepare materials required for various dental treatments	Perform administrative tasks in a dentist's office	Plan a job search	NUMBER OF OBJECTIVES	DURATION (IN HOURS)
SPECIFIC COMPETENCIES (directly related to the practice of the specific occupation)	MODULES																										
	FIRST-LEVEL OPERATIONAL OBJECTIVES																										
	DURATION (IN HOURS)																										
	1	Determine their suitability for the occupation and the training process	S	30																							
	13	Carry out tasks related to chair-side assistance in operative dentistry	B	120	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	●	●	●	○	●	●	●	●	●	●	●	●
	15	Perform tasks related to prevention and treatment planning	B	120	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	●	●	●	○	●	●	●	●	●	●	●	●
	17	Apply dental laboratory techniques	B	120	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	●	●	●	○	●	●	●	●	●	●	●	●
	18	Apply techniques of chair-side assistance in specialized dentistry	B	120	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	●	●	●	○	●	●	●	●	●	●	●	●
	19	Assist in operative dentistry, orthodontics and pedodontics	B	120	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	●	●	●	○	●	●	●	●	●	●	●	●
	20	Assist in dental surgery and prosthodontics	B	90	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	●	●	●	○	●	●	●	●	●	●	●	●
21	Assist in endodontics and periodontics	B	60	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	●	●	●	○	●	●	●	●	●	●	●	●	
22	Perform all dental assistance tasks required in a dental office	S	90	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	●	●	●	●	○	●	●	●	●	●	●	●	●	
NUMBER OF OBJECTIVES		9																							22		
DURATION (IN HOURS)			870																							1500	

S: Situational objective

B: Behavioural objective

▲ Correlation between a step and a specific competency

▲ Correlation to be taught and evaluated

○ Correlation between a general and a specific competency

● Correlation to be taught and evaluated

4. GENERAL OBJECTIVES

The general objectives of the *Dental Assistance* program are presented below, along with the major statement of each corresponding first-level operational objective.

To help students acquire the competencies required for a smooth integration into the training and work environments.

- Determine their suitability for the occupation and the training process.
- Communicate in the workplace and work in a team.
- Observe the rules of professional ethics.
- Plan a job search.

To help students acquire the competencies required to apply preventive measures in the workplace.

- Apply principles and procedures of hygiene and asepsis.
- Take occupational health and safety precautions.
- Apply first-aid techniques.

To help students acquire the competencies required to understand the principles underlying the tasks of the occupation.

- Apply anatomical concepts.
- Apply concepts related to lesions and oral diseases.

- Apply concepts of pharmacology.
- Apply concepts related to oral treatments.
- Apply concepts related to dental materials.

To help students acquire the competencies required to carry out the tasks of the occupation.

- Perform administrative tasks.
- Prepare materials required for various dental treatments.
- Carry out tasks related to chair-side assistance in operative dentistry.
- Perform tasks related to prevention and treatment planning.
- Apply dental laboratory techniques.
- Apply techniques of chair-side assistance in specialized dentistry.

To help students acquire the competencies required to perform occupational tasks in real work settings.

- Assist in operative dentistry, orthodontics and pedodontics.
- Assist in dental surgery and prosthodontics.
- Assist in endodontics and periodontics.
- Perform all dental assistance tasks required in a dental office.

5. FIRST- AND SECOND-LEVEL OPERATIONAL OBJECTIVES

5.1 DEFINITION

A first-level objective is defined for each competency to be developed. Competencies are organized into an integrated training program designed to prepare students to practise the trade or occupation. This systematic organization of competencies produces better overall results than training by isolated objectives. More specifically, it fosters a smooth progression from one objective to the next, saves teaching time by eliminating needless repetition, and integrates and reinforces learning material.

First-level operational objectives are the main, compulsory teaching/learning targets and they are specifically evaluated for certification. There are two kinds of operational objectives: behavioural and situational.

- **A behavioural objective** is a relatively closed objective that describes the actions and results expected of the student by the end of a learning step. Evaluation is based on expected results.
- **A situational objective** is a relatively open-ended objective that outlines the major phases of a learning situation. It allows for output and results to vary from one student to another. Evaluation is based on the student's participation in the activities of the learning context.

Second-level operational objectives are intermediate teaching/learning targets deemed prerequisite for attaining first-level objectives. They are grouped according to the specifications (see 5.2 A) or the phases (see 5.2 B) of the first-level objective.

The division of operational objectives into first- and second-level objectives is based on a clear distinction between the levels of learning:

- learning involving prerequisite knowledge
- learning involving competencies

Second-level operational objectives indicate prerequisite knowledge. They prepare the students to learn what is necessary to attain the first-level operational objectives, which collectively lead to the development of a competency. The objectives should always be adapted to meet the particular needs of the individual students or groups of students.

First-level operational objectives cover the learning that the students need to develop a competency:

- The specifications or the phases of the objective determine or guide specific learning, thereby allowing the competency to be developed step by step.

- The objective as a whole (i.e. the six components and in particular the last phase of a situational objective) determines or guides the overall learning and the integration and synthesis of this learning, allowing the competency to be developed fully.

To attain the objectives, the following learning activities may be prepared:

- specific learning activities for second-level objectives
- specific learning activities for the specifications or phases of first-level objectives
- general learning activities for first-level objectives

5.2 HOW TO READ FIRST-LEVEL OPERATIONAL OBJECTIVES

A. How to Read a Behavioural Objective

Behavioural objectives consist of six components. The first three provide an overview of the objective:

1. The **expected behaviour** states a competency in terms of the general behaviour that the students are expected to have acquired by the end of the module.
2. The **conditions for performance evaluation** define what is necessary or permissible to the students during evaluation designed to verify whether or not the students have attained the objective. This means that the conditions for evaluation are the same wherever and whenever the program is taught.
3. The **general performance criteria** define the requirements by which to judge whether or not the results obtained are generally satisfactory.

The last three components ensure that the objective is understood clearly and unequivocally:

4. The **specifications of the expected behaviour** describe the essential elements of the competency in terms of specific behaviours.
5. The **specific performance criteria** define the requirements for each of the specifications of behaviour. They ensure a more enlightened decision on the attainment of the objective.
6. The **field of application** defines the limits of the objective, where necessary. It indicates cases where the objective applies to more than one task, occupation or field.

B. How to Read a Situational Objective

Situational objectives consist of six components:

1. The **expected outcome** states a competency as an aim to be pursued throughout the course.
2. The **specifications** outline the essential aspects of the competency and ensure a better understanding of the expected outcome.
3. The **learning context** provides an outline of the learning situation designed to help the students develop the required competencies. It is normally divided into three phases of learning:
 - information
 - performance, practice or involvement
 - synthesis, integration and self-evaluation
4. The **instructional guidelines** provide suggested ways and means of teaching the course to ensure that learning takes place and that the same conditions apply wherever and whenever the course is taught. These guidelines may include general principles or specific procedures.
5. The **participation criteria** describe the requirements the students must fulfil, which are usually related to each phase of the learning context. 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.
6. The **field of application** defines the limits of the objective, where necessary. It indicates cases where the objective applies to more than one task, occupation or field.

PART II

MODULE 1: THE OCCUPATION AND THE TRAINING PROCESS

Code: 754 412

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will be able to **determine their suitability for the occupation and the training process.**

SPECIFICATIONS

At the end of this module, the students will:

- Be familiar with the nature of the occupation.
- Understand the training process.
- Evaluate their career choice.

LEARNING CONTEXT

PHASE 1: Information on the Occupation

- Learning about the organization of dental medicine in Québec, through visits and meetings: e.g. history, evolution, specialties, type of establishments in which it is practised, the dental team and each member's role, professional corporations and associations.
- Learning about the nature of the job market in the field of dental assistance, through a meeting with a person from the milieu (dentist or dental assistant) and the presentation of a video: e.g. occupational tasks; requirements of the occupation in terms of health, skills, attitudes, knowledge, personality and responsibilities; employment prospects and remuneration; selection criteria for candidates; possibilities of advancement. Taking notes.
- Writing a summary of the information gathered during visits and meetings, and noting whether this information corresponds to the students' initial perception of the milieu and the occupation.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

- Using this summary to participate in a group discussion of the organization of work and working conditions in a dentist's office, and the demands of the occupation of dental assistant.

PHASE 2: Information on the Training Program

- Learning about the training program in a meeting and by doing research in small groups: content of program, training process, types of evaluation, certification of studies. Taking notes.
- Participating in a group discussion of the content of the program in relation to the occupation and its requirements, using the notes taken and information gathered.

PHASE 3: Evaluation of Their Career Choice

- Evaluating individually their own preferences and aptitudes related to work, and examining whether these are compatible with the requirements of the occupation of dental assistant.
- Writing a summary of their evaluation, specifying aspects of their personality that are compatible and incompatible with the occupation of dental assistant.
- Meeting with the teacher to re-examine their career choice in light of the results of this evaluation.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Make available to students all materials required for their activities, especially those related to the training process (e.g. program, definitions).
- Select establishments to visit that represent the principal work environments where dental assistants are employed.
- Supervise group and small-group activities so as to avoid wasting time.
- Collect the notes taken during activities, as well as the summaries, in order to evaluate the students' participation.
- Make sure that the view of the occupation presented by guest speakers is accurate and objective.
- Encourage students to ask questions and to express themselves.
- Emphasize the importance of making an honest and objective evaluation of one's career choice.
- Provide students with understanding and objective support during the evaluation of their career choice.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PARTICIPATION CRITERIA

PHASE 1:

- Display interest during visits, meetings and the showing of the video.
- Collect information on most of the subjects covered.
- Write up the required summary.
- Participate actively in the discussion.

PHASE 2:

- Participate actively in the meeting and in the research project, and take notes.
- Express their impressions of the training program in relation to the requirements of the occupation.

PHASE 3:

- Carry out the evaluation required in a serious manner.
- Write up the required summary.
- Be willing to discuss their career choice with the teacher.

MODULE 2: CONCEPTS OF ORAL ANATOMY

Code: 754 424

Duration: 60 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply concepts of oral anatomy** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Using diagrams and illustrations
- Focusing exclusively on the concepts required to understand the care administered in dental medicine

GENERAL PERFORMANCE CRITERIA

- Use of appropriate terminology
- Accuracy of identifications, locations and distinctions
- Logical, well-supported associations

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

- A. Identify the main bone and muscle structures of the head that pertain to oral anatomy.

- B. Relate oral sensitivity to the innervation of the face.

- C. Match the anatomy of the different structures of the oral cavity with their respective functions.

SPECIFIC PERFORMANCE CRITERIA

- Location of the main bones of the head and their joints
- Recognition of the components of the upper and lower maxilla
- Location of the chewing muscles, as well as their point of origin and insertion
- Association of the chewing muscles with their particular role.

- Location of the branches of the trigeminal nerve
- Association of the appropriate branch of the trigeminal nerve with the sensitivity of each group of teeth and surrounding tissue

- Location of the salivary glands and their ducts
- Identification of the functions of saliva
- Recognition of the different parts of the tongue, vestibule and palate
- Identification of the respective functions of the tongue, vestibule and palate

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Recognize the anatomy of the teeth and of their support structure.

E. Summarize the process of tooth development.

F. Classify teeth.

SPECIFIC PERFORMANCE CRITERIA

- Identification of the characteristics of dental tissues
- Recognition of the different parts of the tooth
- Recognition of the support structure of the teeth
- Identification of the particular role of various types of periodontic fibres
- Location of the different parts of the gums and soft tissues of the palate
- Relation of dental tissue to the embryonic tissue from which teeth are formed
- Recognition of the different stages in the formation of teeth
- Identification of ages corresponding to periods at which primary and permanent teeth erupt
- Recognition of the features of normal occlusion
- Recognition of the most common abnormalities of tooth development and their consequences
- Recognition of each type of tooth by its morphology and its roots
- Relation of the role of each tooth to its morphological features
- Recognition of different tooth surfaces
- Grouping of teeth by quadrant, according to the international system

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Define the following terms: anatomy, physiology, embryology, histology, morphology.
2. Describe the structure of the cell and the role of the nucleus.
3. Recognize diagrams of the human body.
4. Recognize and identify the role of the following tissues: epithelial, connective, nerve, bone, cartilaginous, muscular.
5. Identify the components and major functions of the following systems of the human body: musculoskeletal, nervous, circulatory, respiratory, digestive, urinary, hormonal, reproductive.

Before learning how to identify the main bone and muscle structures of the head pertaining to oral anatomy (A):

6. Define articulation and state its function.

Before learning how to match the anatomy of the different structures of the oral cavity with their respective functions (C):

7. Name the various types of glands.
8. Distinguish between an endocrine gland, an exocrine gland and a mixed gland.
9. Define pH.

Before learning how to summarize the process of tooth development (D):

10. Define the ectoderm, mesoderm and endoderm.
11. Define the following prefixes and suffix: hypo-, super-, micro-, macro-, exo-, -genesis.

MODULE 3: LESIONS AND ORAL DISEASES

Code: 754 433

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply concepts related to lesions and oral diseases** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Focusing exclusively on the concepts required for the practice of the occupation
- By means of:
 - illustrations
 - slides
 - learning contexts (where applicable)

GENERAL PERFORMANCE CRITERIA

- Use of appropriate terminology
- Accurate identifications
- Logical, well-supported associations and explanations

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Explain the process of tooth decay.

- Identification of the different stages in the process of tooth decay and the phenomena associated with each stage
- Illustration of the different classes of cavities by the abbreviations designating them, referring to an odontogram
- Identification of the causes, consequences and prevention of dental caries

B. Identify the principal lesions of dental pulp.

- Recognition of the most common lesions of dental pulp
- Identification of the causes, consequences and prevention of lesions of dental pulp

C. Identify the principal diseases of the oral mucosa.

- Recognition of the most common diseases of the oral mucosa
- Recognition of the causes, consequences and prevention of the principal diseases of the oral mucosa

D. Identify the principal diseases of the periodontium.

- Recognition of the most common diseases of the periodontium
- Identification of the signs of alveolitis, periodontitis, bone resorption and fracture
- Identification of the causes, consequences and prevention of diseases of the gums and the support structure of the teeth

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

- E. Connect morphological changes in the hard tissues of the masticatory apparatus with their causes.

- F. Recognize the signs of dysfunction of the temporomandibular articulation.

- G. Relate systemic diseases to oral health.

SPECIFIC PERFORMANCE CRITERIA

- Identification of changes caused by poor oral habits
- Recognition of chemical or mechanical alterations of teeth
- Association of the different types of malocclusion with abnormalities of facial profile development
- Identification of the causes and consequences of an impacted tooth and a torus

- Identification of the main signs of dysfunction of the temporomandibular articulation

- Association of systemic diseases with common oral disorders

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Define the following prefixes and suffixes: hypo-, hyper-, peri-, infra-, retro-, pyo-, pro-, -osis, -oma, -itis, -plasia, -emia, -asis.
2. Recognize the following lesions: papule, macule, vesicle, pustule, nodule, haematoma, tumour, granuloma, ecchymosis.
3. Know the anatomical structure of the tooth.

Before learning how to identify the principal lesions of the dental pulp, the oral mucosa and the periodontium (B, C, D):

4. Know the characteristics of dental pulp, the oral mucosa and the periodontium.
5. Associate each of the following groups of diseases with the anatomical structure affected: hyperaemia, pulpitis, periapical abscess, granuloma, radicular cyst; herpes, aphtha, cheilosis, hyperplasia, stomatitis, candidiasis, ulcer, hyperkeratosis, leucoplakia, lithiasis, hypertrophy; gingivitis, periodontal pocket, periodontal abscess, fistula, pericoronitis, gona, epulis, pyorrhoea; alveolitis, periodontitis, bone resorption, fracture.

Before learning how to connect morphological changes in the hard tissues of the masticatory apparatus with their causes (E):

6. Describe the following habits: bruxism; tongue, finger and thumb sucking; visceral swallowing; mouth breathing.
7. Define the following terms: overbite, rotation, migration, labially positioned, lingually positioned, articulated.
8. Define the following terms: prognathism, retrognathism, cleft palate, harelip.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to relate systemic diseases to oral health (G):

9. Define the following pathological conditions: anaemia, leukaemia, diabetes, paralysis, acquired immunodeficiency syndrome (AIDS), syphilis, tuberculosis.

MODULE 4: HYGIENE AND ASEPSIS

Code: 754 443

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply principles and procedures of hygiene and asepsis** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working individually
- By means of learning contexts, where applicable
- Using the appropriate materials

GENERAL PERFORMANCE CRITERIA

- Accuracy of identifications
- Logical, well-supported associations and distinctions
- Application of appropriate asepsis and safety measures

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Understand the connections between micro-organisms and the most common contagious diseases.

B. Recognize measures of personal and professional hygiene to be applied in a dentist's office.

C. Relate methods of controlling contamination to the maintenance of work areas, equipment and materials.

SPECIFIC PERFORMANCE CRITERIA

- Recognition of routes of entry for infection, methods of transmission and factors favouring proliferation of micro-organisms
- Association of common contagious diseases with routes of entry and methods of transmission of micro-organisms
- Recognition of local and systemic signs of infection
- Recognition of habits likely to increase the resistance of an organism to infection
- Recognition of measures of personal hygiene that dental assistants must apply in carrying out their duties
- Identification of general precautions appropriate to professional situations and the reasons for such precautions
- Association of different types of gloves with their features and uses
- Identification of the appropriate method of maintenance:
 - in work areas (e.g. counter, cubicles)
 - in the dental unit (chairs, instrument tray, slow and fast suction hoses, lamp, cuspidor, filters)

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

D. Apply procedures for cleaning and disinfecting.

- for the instruments and accessories used in the treatment room
- for laboratory equipment and accessories (wheels, vibrator, motor)
- for X-ray equipment and accessories

- Application of appropriate measures of asepsis and safety
- Appropriate selection of products according to type of equipment or material
- Observance of manufacturer's instructions concerning the preparation and use of products, as well as the order of steps for cleaning and disinfecting

E. Apply sterilization procedures using various types of equipment.

- Application of appropriate measures of asepsis and safety
- Proper cleaning procedures according to the instruments and accessories to be sterilized
- Proper lubrication of the turbine and handpiece before sterilization
- Proper packaging and sealing of instruments and accessories, where applicable
- Proper placement of instruments and accessories on the tray or in the equipment
- Proper adjustment of temperature and duration of sterilization according to type of equipment used
- Proper storage of sterilized materials at the appropriate time

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

F. Apply the regulations relating to biomedical waste.

G. Recognize the responsibilities of the dentist and the assistant in preventing contamination in the dentist's office.

SPECIFIC PERFORMANCE CRITERIA

- Application of appropriate measures of asepsis and safety
- Recognition of biomedical waste subject to current regulations
- Proper application of preventive measures required by the regulations currently in effect:
 - use of proper containers
 - proper labelling
 - sterilization of waste to be destroyed or stored
 - compilation and recording of data for administrative reports concerning biomedical waste
- Identification of the respective responsibilities of the dentist and the assistant

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Define the following terms: hygiene, asepsis, contamination, contagion, epidemic, prevention, prophylaxis.

Before learning how to understand the connections between micro-organisms and the most common contagious diseases (A):

2. Define the following terms: micro-organism, microbe, pathogenic, bacterial flora, routes of entry, methods of transmission.
3. Define the following terms: bacteria, virus, fungus, parasite.
4. Explain briefly the function of the body's immune system.
5. Explain what is meant by "a healthy lifestyle."

Before learning how to recognize measures of personal and professional hygiene to be applied in a dentist's office (B):

6. Define the chain of contamination.
7. Distinguish among the host, the germ carrier and the vector.
8. Distinguish among cleaning, disinfection and sterilization.
9. Define the objectives of the general precautions recommended by the Bureau of Communicable Disease Epidemiology at the Laboratory Centre for Disease Control.
10. Define the following terms: antigen, antibody, vaccine, symptomatic, asymptomatic.
11. Associate vaccination with the body's defense mechanisms.
12. Describe the attitude to be adopted respecting the control of contamination in the dentist's office.

Before learning how to relate methods of controlling contamination to the maintenance of work areas, equipment and materials (C):

13. Describe the dentist's treatment room and its components.
14. Describe the components of the X-ray area and the laboratory.
15. Recognize the major classes of instruments and accessories used in a dentist's office.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to apply procedures for cleaning and disinfecting (D):

16. Recognize the features of different categories of cleaning products and disinfectants used in a dentist's office, and their commercial names.
17. Explain the importance of respecting the manufacturer's instructions when using cleaning products and disinfectants.

Before learning how to apply sterilization procedures using various types of equipment (E):

18. Compare different types of sterilization equipment: dry heat, autoclave (water vapour, alcohol vapour), statim, glass bead sterilizer, dipping basin.
19. Recognize the different sterilization products used in a dentist's office and indicate their advantages and disadvantages.
20. Describe the method for verifying the effectiveness of sterilization and explain its importance.
21. Explain the reason for lubricating the turbine and handpiece before sterilization.

Before learning how to apply the regulations relating to biomedical waste (F):

22. Distinguish between anatomical and non-anatomical biomedical waste, as defined in the *Biomedical Waste Regulation of the Environment Quality Act* (R.S.Q., c.Q-2).
23. Recognize aspects of the regulation governing biomedical waste that apply to a dentist's office.

MODULE 5: CONCEPTS OF PHARMACOLOGY

Code: 754 452

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply concepts of pharmacology** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Focusing exclusively on the concepts required for the practice of the occupation
- Using a variety of medications and illustrations of the dosage forms usually found in a dentist's office
- Making use of learning contexts, where applicable

GENERAL PERFORMANCE CRITERIA

- Use of appropriate terminology
- Accuracy of identifications and interpretations
- Logical, well-supported associations

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

- A. Recognize the sections of the law that apply to the prescription, use and administration of medications.

- B. Recognize the principal medications used in dental medicine, and their effects.

SPECIFIC PERFORMANCE CRITERIA

- Recognition of the categories of people authorized by the *Pharmacy Act* to prescribe and use medications in the performance of their professional duties
- Identification of persons authorized by the *Medical Act* to administer medications
- Recognition of restrictions imposed on dentists by the *Dental Act* concerning the prescription of medication

- Association of commercial names with the principal medications belonging to each of the following groups:
 - antibiotics
 - antifungals
 - analgesics
 - anti-inflammatories
 - anaesthetics
 - tranquillizers and sedatives
 - haemostatics
- Recognition of the desired effects and the side effects of the principal medications in each group
- Recognition of variable factors governing the effects of medications
- Recognition of the side effects of medications
- Recognition of the most serious and most common interactions between drugs used in dental medicine and drugs frequently used by patients

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

C. Understand the connection between the routes of administration of a drug and its dosage form and its action.

D. Recognize the methods for using local anaesthetics.

E. Interpret pharmaceutical abbreviations.

SPECIFIC PERFORMANCE CRITERIA

- Recognition of the various dosage forms and routes of administration of medications used in dental medicine
- Recognition of the advantages and drawbacks of each route of administration and dosage form
- Association of routes of administration with the principal medications used in dental medicine
- Recognition of the criteria for selecting an anaesthetic
- Identification of the injection site according to oral anatomy and type of treatment
- Recognition of factors influencing the induction time and duration of the anaesthetic
- Recognition of signs of complications involving an anaesthetic
- Proper interpretation of abbreviations relating to the form, dosage, timing and method of administration of medications used in a dentist's office

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

F. Recognize the precautions to be taken in a dentist's office concerning medications.

**SPECIFIC PERFORMANCE
CRITERIA**

- Recognition of information that must be recorded in a patient's file concerning medication
- Recognition of information that clients must be provided with concerning medication
- Identification of general signs of the abuse of medications and drugs
- Identification of precautions to be taken concerning expiry dates and the storage and conservation of medications

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Define the following terms: pharmacology, pharmacy, medication, drug, prescription, dose, dosage, poison, narcotic.
2. Indicate the various origins and sources of medications.

Before learning how to recognize the principal medications used in dental medicine, and their effects (B):

3. Distinguish between the generic name and the commercial name of a medication.
4. Explain what is meant by the "desired effect" and the "side effect" of a medication.
5. Distinguish between therapeutic treatment and preventive treatment.
6. Describe the four phases of the absorption of medication: absorption, distribution, metabolism, elimination.
7. Recognize the symptoms of allergy and anaphylactic shock.

Before learning how to understand the connection between the routes of administration of a drug and its dosage form and its action (C):

8. Identify the direct and indirect routes of administration of medications.

Before learning how to recognize the methods for using local anaesthetics (D):

9. Define the following terms: general anaesthesia, local anaesthesia, injectable preparation, topical preparation.
10. Recognize the composition of local anaesthetics.

MODULE 6: ORAL TREATMENTS

Code: 754 464

Duration: 60 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply concepts related to oral treatments** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Focusing exclusively on the most common treatments
- Making use of learning contexts and case studies, where applicable

GENERAL PERFORMANCE CRITERIA

- Use of appropriate terminology
- Accurate identifications and distinctions
- Logical, well-supported associations

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Identify the different treatments used in operative dentistry.

B. Identify the various prosthodontic treatments.

SPECIFIC PERFORMANCE CRITERIA

- Association of principal operative dentistry treatments with their indications
 - Recognition, in correct order, of the steps involved in restorative treatments and the operations belonging to each step
 - Knowledge of aseptic and safety measures appropriate to operative dentistry treatments
 - Recognition of incidents that may occur during operative dentistry treatments
 - Recognition of possible post-operative complications related to operative dentistry treatments
 - Determination of post-operative advice appropriate to various treatments
-
- Association of principal prosthodontic treatments with their indications
 - Recognition, in correct order, of the steps involved in the principal prosthodontic treatments and the operations belonging to each step
 - Knowledge of aseptic and safety measures appropriate to prosthodontic treatments
 - Recognition of incidents that may occur during prosthodontic treatments
 - Recognition of possible post-operative complications related to prosthodontic treatments

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

C. Identify the various endodontic treatments.

- Determination of post-operative advice appropriate to various treatments
- Association of principal endodontic treatments with their indications
- Recognition, in correct order, of the steps involved in the principal endodontic treatments and the operations belonging to each step
- Knowledge of aseptic and safety measures appropriate to endodontic treatments
- Recognition of incidents that may occur during endodontic treatments
- Recognition of possible post-operative complications related to endodontic treatments
- Determination of post-operative advice appropriate to various treatments

D. Identify the various periodontic treatments.

- Association of principal periodontic treatments with their indications
- Recognition, in correct order, of the steps involved in the principal periodontic treatments and the operations belonging to each step
- Knowledge of aseptic and safety measures appropriate to periodontic treatments

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

E. Identify the various treatments involved in dental surgery.

SPECIFIC PERFORMANCE CRITERIA

- Recognition of incidents that may occur during periodontic treatments
- Recognition of possible post-operative complications related to periodontic treatments
- Determination of post-operative advice appropriate to various treatments

- Association of principal treatments in dental surgery with their indications
- Recognition, in correct order, of the steps involved in the principal treatments in dental surgery and the operations belonging to each step
- Knowledge of aseptic and safety measures appropriate to treatments in dental surgery
- Recognition of incidents that may occur during treatments in dental surgery
- Recognition of possible post-operative complications related to the different treatments
- Determination of post-operative advice appropriate to various treatments

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

F. Identify the various orthodontic treatments.

**SPECIFIC PERFORMANCE
CRITERIA**

- Recognition of the various orthodontic treatments in relation to the equipment or accessories used
- Knowledge of aseptic and safety measures appropriate to orthodontic treatments
- Recognition of possible complications resulting from orthodontic treatments
- Determination of advice appropriate to various orthodontic treatments

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Define the following terms: operative dentistry, prosthodontics, endodontics, periodontics, dental surgery, orthodontics, pedodontics.
2. Match the following prefixes and suffixes with their meanings: ex-, osteo-, -tomy, -ectomy, -plasty.

Before learning how to identify the different treatments used in operative dentistry (A):

3. Define the following terms: filling, pulp capping, facets, whitening, crown.
4. Identify the basic dental cements and their use in operative dentistry.

Before learning how to identify the various prosthodontic treatments (B):

5. Define the following terms: complete denture, removable partial denture, fixed partial denture, inlay, implant.

Before learning how to identify the various endodontic treatments (C):

6. Define the following terms: root canal, biopulpectomy, pulpotomy, pulpectomy, drainage, apicoectomy (root resection), retrograde filling.
7. Associate different bactericides with endodontic interventions.

Before learning how to identify the various periodontic treatments (D):

8. Define the following terms: curettage, gingivectomy, gingivoplasty, graft, twinning, root planing, ostectomy, osteoplasty.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to identify the various treatments involved in dental surgery (E):

9. Define the following terms: extraction, excision, ablation, frenectomy, operculectomy, alveolectomy, implant, avulsion.
10. Identify the medications generally used in dental surgery.

Before learning how to distinguish the various orthodontic treatments (F):

11. Identify the dental materials used in preparing the surface of the teeth.
12. Relate myofunctional exercises to the correction of poor habits or oral abnormalities.

MODULE 7: DENTAL MATERIALS

Code: 754 475

Duration: 75 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must
apply concepts related to dental materials
in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Making use of learning contexts, where applicable
- Using the appropriate materials

GENERAL PERFORMANCE CRITERIA

- Accuracy of identifications and distinctions
- Logical, well-supported associations

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Associate the various types of impression materials and gypsum products with their properties and uses.

B. Associate the various types of waxes with their properties and uses.

SPECIFIC PERFORMANCE CRITERIA

- Recognition of the following dental materials by their generic and commercial names and their formats:
 - irreversible hydrocolloids
 - polysulfides
 - silicones
 - polyethers
 - polysiloxane vinyls
 - zinc oxide-eugenol
 - modelling compounds
- Identification of the properties of the various impression materials and gypsum products
- Association of impression materials and gypsum products with the various types of primary and final impressions in each dental discipline
- Association of the various types of impression materials and gypsum products with their methods of preparation and mixing
- Identification of precautions pertaining to the use of impression materials and gypsum products

- Recognition of the following waxes by their generic and commercial names and their formats:
 - dental inlay casting wax
 - boxing wax
 - sticky wax
 - utility wax

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

- C. Associate the various types of dental cement and varnish with their properties and uses.

SPECIFIC PERFORMANCE CRITERIA

- bead wax
- impression wax
- baseplate wax
- casting wax
- bite wax
- Identification of the properties of each type of wax
- Association of each type of wax with particular applications in dentistry
- Association of the different types of wax with their methods of preparation and handling
- Recognition of the following types of cements and varnishes by their generic and commercial names and their formats:
 - calcium hydroxides
 - zinc oxide-eugenol dental cement
 - zinc phosphates
 - polycarboxylate cement
 - glass ionomer cement
 - surgical cements
 - protective varnish
- Identification of the properties of each type of cement and dental varnish
- Association of the different types of dental cement and varnish with their applications
- Association of each type of dental cement with its effects on dental structures and pulp tissues

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Associate the various types of restoration materials with their properties and uses.

E. Associate the various types of polishing and teeth-whitening agents with their properties and uses.

SPECIFIC PERFORMANCE CRITERIA

- Association of the different types of dental cement with their methods of preparation and mixing
- Identification of precautions pertaining to the use of dental cements and varnishes
- Recognition of the principal restoration materials by their commercial names
- Identification of the properties of an amalgam and the precautions to be taken in its use
- Identification of the properties of the different aesthetic compounds used in dentistry
- Association of the various types of restoration materials with their respective applications
- Association of the various types of restoration materials with their method of preparation and mixing
- Identification of the properties of various polishing and teeth-whitening agents
- Association of various teeth-polishing agents with their particular applications

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

- F. Associate the different types of dental resins with their properties and uses.

**SPECIFIC PERFORMANCE
CRITERIA**

- Recognition of the following types of resins by their generic and commercial names and their formats:
 - autopolymer acrylic
 - heat-curing acrylic
 - pit and fissure sealant
 - rebase resin
- Identification of various properties of dental resins and precautions pertaining to their use
- Association of each type of resin with its particular applications in dentistry
- Association of the different types of dental resins with their method of preparation and mixing

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Understand the role of the National Bureau of Standards and the American Dental Association in the study of dental materials.
2. Compare the characteristics of a crystalline structure with those of an amorphous structure.
3. Define the following terms as applied to dental materials: hardness, compressive force, elasticity, pliability, elongation, brittleness, malleability, distortion, thermal conductivity, galvanism, expansion, fusibility, dehydration, solubility, setting time, handling time, setting contraction, endothermic, exothermic, polymerization.

Before learning how to associate the various types of impression materials and gypsum products with their properties and uses (A):

4. Review the distinction between a preliminary impression and a final impression.
5. Review the distinctions between removable full dentures, partial removable dentures and partial fixed dentures.

Before learning how to associate the various types of waxes with their properties and uses (B):

6. Define the following terms: baseplate, wax rim, boxing, inlay, individual impression tray.

Before learning how to associate the various types of dental cement and varnish with their properties and uses (C):

7. Review the distinction between direct pulp capping and indirect pulp capping.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to associate the various types of restoration materials with their properties and uses (D):

- 8. Review the characteristics of the different classes of cavities.
- 9. Distinguish between an inlay and a gold filling.

Before learning how to associate the various types of dental resins with their properties and uses (F):

- 10. Distinguish a stock impression tray from a custom impression tray.
- 11. Distinguish between temporary bridges and crowns and permanent bridges and crowns.

MODULE 8: OCCUPATIONAL HEALTH AND SAFETY

Code: 754 482

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will be able to take occupational health and safety precautions.

SPECIFICATIONS

During this module, the students will:

- Become familiar with aspects of the *Act respecting occupational health and safety* that apply to personnel working in a dentist's office.
- Become familiar with the dangers and preventive measures involved in the practice of the occupation.
- Evaluate their behaviours with respect to prevention.

LEARNING CONTEXT

PHASE 1: Familiarization with the *Act Respecting Occupational Health and Safety*

- Working in small groups, drawing up a list of provisions of the *Act Respecting Occupational Health and Safety* that apply to personnel working in a dentist's office, using reference documents.
- Participating in pooling the results of the research done in small groups.
- Under the teacher's direction, preparing for a meeting with a specialist in prevention by developing a questionnaire on provisions of the *Act* that apply to dental assistants.
- Participating in the meeting and afterwards individually, writing up a short paper containing a commentary on the talk and a summary of its content.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PHASE 2: Familiarization with the Risks Inherent in the Occupation and the Resulting Preventive Measures

- Carrying out a research project, in small groups, to determine the risk factors involved in the practice of the occupation of dental assistant in each of the following categories: biological, chemical, physical, mechanical, bio-mechanical, psychosocial. Taking notes.
- Participating in pooling the results of the research done in small groups and discussion to include preventive measures appropriate to each risk category.
- Participating in a group research project, under the teacher's direction, on the symbols for dangerous substances used in a dentist's office and on the information contained in a material safety data sheet (MSDS). Later, individually filling out a questionnaire prepared by the teacher.
- Attending a showing of a video illustrating the features of a properly installed treatment room and dental assistant's workstation, including recommended working positions designed to prevent fatigue and physical changes likely to cause temporary or permanent discomfort. Taking notes.
- Participating in a discussion of the content of the video and taking advantage of the opportunity to find answers to questions raised by it.
- Attending a demonstration of principles of weight transfer and methods for moving a patient from a wheelchair to a treatment chair. Later, participating in exercises to put these methods into practice.
- Attending a demonstration on the use of a chemical extinguisher and a fire blanket. Later, discussing measures to be taken and behaviour to be adopted during a fire in a dentist's office.
- Drawing up a list of the responsibilities of employers and those of dental assistants concerning occupational health and safety, using the knowledge acquired in the preceding activities and working in small groups.
- Participating in a group discussion of the sharing of responsibility for health and safety in a dentist's office.

PHASE 3: Evaluation of Their Behaviour Concerning Prevention

- Reflecting on their behaviour, individually, where prevention measures are concerned, at home, in the car, at school, and, if applicable, at work. Noticing lapses in each situation, and recording means of improvement.
- At the right time, presenting the results of their self-evaluation to the group and participating in the ensuing discussions.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

INSTRUCTIONAL GUIDELINES

The teacher should:

- Verify in advance the availability of materials required for activities.
- Verify in advance the availability of resource persons invited to speak.
- Make sure that the formation of small groups takes into account the diversity of students.
- Determine in advance the duration of each activity and inform students of this.
- Direct group meetings and provide support for students during activities in small groups.
- Support individual expression during group discussions.
- Collect notes in order to evaluate the students' participation.
- Make sure that each student practises the methods of lifting and transferring weight.
- Take advantage of all possible opportunities to remind students of the importance of adopting the right preventive attitudes and acquiring preventive habits.

PARTICIPATION CRITERIA

PHASE 1:

- Collect information on relevant provisions of the *Act Respecting Occupational Health and Safety*.
- Participate actively in the group discussion.
- Participate actively in preparations for the meeting.
- Write up the papers required and hand them in to the teacher.

PHASE 2:

- Participate actively in the research projects and take notes.
- Express themselves during the information pooling and discussions.
- Make an honest effort to fill out the questionnaire correctly.
- Display an interest in the video presented and write down their reflections on it.
- Show interest during demonstrations.
- Make an effort to properly apply the methods for transferring and lifting weight.
- Draw up the list requested and hand it in to the teacher.

**FIRST-LEVEL OPERATIONAL OBJECTIVE
SITUATIONAL OBJECTIVE**

PHASE 3:

- Carry out the required self-evaluation, record the results and hand them in to the teacher.
- Be willing to discuss with the group the results of the self-evaluation.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Explain the importance of prevention in the workplace, particularly in a dentist's office.

Before undertaking the activities of Phase 1:

2. Define the role of the *Act Respecting Occupational Health and Safety*, as well as that of the CSST (Commission de la santé et de la sécurité du travail).

Before undertaking the activities in Phase 2:

3. Define the following terms: biological, chemical, physical, mechanical, bio-mechanical, psychosocial.
4. Review the routes of entry and methods of transmission of micro-organisms.
5. State the mechanical principles underlying the movement of persons and lifting of loads.
6. Define a "functional working position."
7. Define the following expressions applied to various products used in dental care: physical characteristics, inflammable and explosive properties, toxic properties.

MODULE 9: FIRST AID

Code: 754 492

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply first-aid techniques** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Using appropriate materials
- By means of learning contexts and simulations
- Working on a mannequin or a subject, depending on the treatment to be administered

GENERAL PERFORMANCE CRITERIA

- Demonstration of attentive reassurance to the person being assisted
- Search for any pertinent medical information
- Observance of rules of hygiene, safety and ethics
- Observance of any counter-indication concerning a particular treatment
- Appropriate communication with the person being assisted

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

- | | |
|---|--|
| A. Verify the contents of the first-aid kit. | <ul style="list-style-type: none"> - Recognition of the components of the first-aid kit, and their uses - Recognition of periodic verifications to be done of the first-aid kit |
| B. Apply the general procedure for intervention in an emergency situation. | <ul style="list-style-type: none"> - Observance of the correct order of the steps of the procedure, in terms of priorities |
| C. Administer first aid in case of change of state of consciousness. | <ul style="list-style-type: none"> - Recognition of the signs of: <ul style="list-style-type: none"> • fainting • unconsciousness • coma - Appropriate choice of treatment according to signs recognized - Appropriate position of the person according to his or her condition and possible risks |
| D. Administer first aid in cases of respiratory arrest, cardiac arrest or respiratory and cardiac arrest. | <ul style="list-style-type: none"> - Recognition of the signs of: <ul style="list-style-type: none"> • respiratory arrest • cardiac arrest • respiratory and cardiac arrest - Choice of resuscitation technique or techniques according to the age and condition of the person - Proper application of techniques |
| E. Administer first aid in case of obstruction of the respiratory passages. | <ul style="list-style-type: none"> - Recognition of the signs of: <ul style="list-style-type: none"> • partial obstruction • total obstruction - Choice of first-aid technique to use according to the age and condition of the person - Proper application of techniques |

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

F. Administer first aid in case of haemorrhage or shock.

- Recognition of the signs of:
 - external haemorrhage
 - internal haemorrhage
 - shock
- Appropriate choice of treatment according to the situation
- Proper administration of treatments
- Precautions taken against contact with blood, where applicable

G. Administer first aid in case of burns to the body.

- Recognition of the different types of burns in terms of their causes and the layers of skin affected
- Appropriate selection of treatment according to the seriousness of the burn and the condition of the person
- Proper administration of treatment and observance of appropriate aseptic measures

H. Administer first aid in case of injury or burns to the eyes.

- Appropriate choice of treatment according to type of problem:
 - dust in the eye
 - particle (adherent or penetrating) in the eye
 - burn to the eye from a chemical substance
- Proper administration of treatment

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

I. Apply first aid in case of intoxication.

J. Administer first aid in cases of various health problems.

K. Administer first aid in cases of bone or joint lesions.

SPECIFIC PERFORMANCE CRITERIA

- Recognition of signs of intoxication from:
 - inhalation of toxic substances
 - ingestion of toxic substances (e.g. contaminated food, excessive quantities of alcohol, medication or drugs)
- Appropriate selection of method of intervention according to type of intoxication and condition of the person

- Recognition of the signs of:
 - angina
 - bronchial asthma
 - hyperventilation
 - convulsion
 - hypoglycaemia or hyperglycaemia
 - allergic reaction
- Appropriate selection of treatment according to the situation
- Proper administration of treatment

- Recognition of the signs of:
 - fracture
 - dislocation
 - sprain
- Appropriate choice of technique according to site and type of wound and the condition of the person
- Use of material appropriate to type of wound
- Application of rules concerning moving and manipulating patient
- Proper application of techniques

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Define first aid, and state its goals and the legal principles associated with it.
2. State the particular features of administering first aid in a dentist's office.
3. Identify the safety measures that reduce the danger of contamination when administering first aid.
4. Recognize the principles that should govern the actions of the first-aider in cases of minor or major injuries.
5. Describe the particular roles of different organizations providing assistance in emergency situations.
6. State the normal pulse and breathing rates per minute.
7. Take the pulse at the radial artery and at the carotid artery.
8. Observe the respiratory rhythm of a subject.

Before learning how to administer first aid in a case of change of state of consciousness (C):

9. Recognize cases where the lateral safety position is counter-indicated.
10. Recognize the precautions to be taken with an unconscious person.

Before learning how to administer first aid in case of respiratory arrest, cardiac arrest or respiratory and cardiac arrest (D):

11. Review the anatomy of the cardiac and respiratory systems.
12. Define cardiac arrest and respiratory arrest.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to administer first aid in case of obstruction of the respiratory passages (E):

- 13. Define suffocation.
- 14. Identify the principal causes of suffocation.
- 15. Recognize the counter-indications for abdominal pressure.

Before learning how to administer first aid in case of haemorrhage or shock (F):

- 16. Define haemorrhage and shock.

Before learning how to administer first aid in case of burns to the body (G):

- 17. Define the different layers of skin.
- 18. Define first-, second- and third-degree burns.
- 19. Explain why neither grease nor disinfectant should be applied to a burn.

Before learning how to administer first aid in case of injury or burns to the eyes (H):

- 20. Recognize the different parts of the eye.

Before learning how to apply first aid in case of intoxication (I):

- 21. Identify the principal products likely to induce intoxication in a dentist's office.
- 22. Identify the counter-indications for inducing vomiting in cases of intoxication.
- 23. Give reasons for the importance of identifying the product that induced intoxication.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to administer first aid in cases of various health problems (J):

24. Define the following terms: hyperventilation, convulsion, hypoglycaemia, hyperglycaemia, allergic reaction.
25. Identify the particular precautions to be taken in administering first aid in each of the situations mentioned above.

Before learning how to administer first aid in cases of bone or joint lesions (K):

26. Recognize the dangers involved in moving a person suffering from fracture, dislocation or sprain, and the precautions to be taken.

MODULE 10: COMMUNICATION AND TEAMWORK

Code: 754 503

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will be able to
communicate in the workplace and work in a team.

SPECIFICATIONS

At the end of this module, the students will:

- Be familiar with the basic principles of communication.
- Be familiar with the particular features of communication with different categories of client.
- Understand the principles according to which a team functions.
- Evaluate their ability to communicate and to work in a team.

LEARNING CONTEXT

PHASE 1: Familiarization with the Basic Principles of Communication

- Attending a presentation on the basic components of communication: e.g. transmitter, message, receiver. Taking notes.
- Preparing a role-playing exercise in groups of three, reflecting a real-life situation in which each student has an opportunity to play the role of transmitter, receiver and observer/carrier. Noting, during the exercise, observations on the quality of the message, and the consistency of the message received with the message carried.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

- Participating in a group discussion to share observations noted, based on the following themes: quality of the verbal message transmitted (e.g. words used, intonation, clarity, etc.); consistency between the message transmitted, the message received and the message carried; quality of listening; factors influencing communication; principal omissions observed in verbal communication; aspects of non-verbal communication facilitating understanding of the message; role in which each person feels the most at ease.
- In teams of three, attempting to associate qualities with each of the following aspects of communication: words, voice, listening, questions, answers. Afterwards, trying to give meaning to each of the following expressions of body language: slow movements and limited gestures; tightening of grip on the dentist's chair; constant change of position; quick, shallow breathing. Taking notes.
- Participating in a group discussion to share the results of the work in small groups and correcting their notes, where necessary.

PHASE 2: Familiarization with Particular Techniques of Approach with Different Clientele in a Dentist's Office

- Researching, in small groups, the particular features of communication with various types of clients in a dentist's office: child, adolescent, adult, senior, person speaking a foreign language, handicapped person. Taking notes.
- Participating in a discussion to share the results of the research in small groups and to supplement it, making use of the following themes: approach, level of language, subjects of conversation, non-verbal communication, respect and discretion, ways of requesting information and giving practical advice.
- Preparing a scenario, in groups of three, illustrating the difficulties of communication with the following clients: frightened patients, patients experiencing anxiety just before dental treatment, patients affected with sight or hearing impairments or mutism, patients who speak a foreign language. Presenting this scenario to the teacher for approval.
- Participating in a presentation of the scenario developed, and during the presentations of other groups, taking notes on the general quality of the presentations, in particular the communication and behaviour of the assistant in coping with the situations represented.
- Participating in a group discussion on the quality of the presentations; pointing out both the strengths and weaknesses of the presentations; suggesting, where necessary, ways of behaving that would be more appropriate to certain situations.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PHASE 3: Familiarization with Telephone Communication in the Workplace

- Taking stock, individually, of how they communicate on the telephone, using the following reference points: length of delay before answering, forms of politeness used, interest displayed, length of calls, transferral of calls to other persons. Afterwards, answering a questionnaire on telephone protocol, choosing, from among the suggested responses, the most appropriate one for each situation described.
- Participating in a group discussion to share results of the preceding activity and note the number of correct answers obtained, in order to evaluate their ability to take telephone calls correctly. Correcting wrong answers and understanding clearly the reasons for the errors.
- Participating in a role-playing exercise prepared by the teacher based on situations occurring in a dentist's office (e.g. making appointments, emergencies, cancellation of appointments) in which each student in turn has an opportunity to play the role of dental assistant. Contributing to the evaluation of each presentation by offering positive and negative observations.

PHASE 4: Familiarization with the Basic Principles of Teamwork

- Reflecting, individually, on their behaviour in a group, referring to the preceding activities, past experience and the following topics: leadership, degree of participation in a large or small group, degree of satisfaction, flexibility, cooperation, acceptance of criticism. Noting the results of these reflections.
- Participating in a group discussion to share the reflections noted and broaden the discussion to include the following aspects: the role of each person on a dental team, how to take one's place within the team, the importance of harmonious relationships in a working team.

PHASE 5: Evaluation of Their Ability to Communicate and Work in a Team

- Drawing up, individually, a list of their strengths and weaknesses in communication and teamwork, using past experience and the observations heard during the preceding activities. Referring to the following topics: quality of listening, quality of language, general behaviour with superiors and colleagues, ability to adapt to various situations, role and quality of participation in a working group.
- Participating in an individual meeting with the teacher to discuss their self-evaluation and possible means of improvement.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

INSTRUCTIONAL GUIDELINES

The teacher should:

- Make available to the students all the materials necessary for carrying out the activities.
- Prepare in advance a dozen objective questions on telephone protocol based on situations likely to occur in a dentist's office.
- Provide support for small groups.
- Lead group discussions and supplement the research carried out by the students.
- Make sure that all the students express themselves during group activities.
- Determine in advance the time allotted to learning contexts and define clearly the rules of the exercise.
- Make sure that the examples chosen and the situations created are representative of the working milieu.
- Make sure that discussions are carried out in a spirit of mutual respect.
- Collect students' notes in order to evaluate participation.
- Help students to evaluate themselves objectively and to find ways of making improvements.

PARTICIPATION CRITERIA

PHASE 1:

- Attend the presentation and display interest.
- Participate actively in the preparation and presentation of the role-playing exercise.
- Note their observations on the quality of the presentations.
- Participate actively in small-group work and try to record relevant associations in their notes.
- Participate actively in group discussions.

PHASE 2:

- Participate actively in small-group research and take notes.
- Participate actively in group discussions and information-sharing sessions.
- Participate actively in preparing role-playing scenarios.
- Demonstrate a serious attitude and interest during presentations.
- Contribute to the evaluation of the scenarios presented.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PHASE 3:

- Conscientiously carry out the self-examination requested and answer the questionnaire.
- Participate actively in the sharing of information.
- Play seriously the role assigned to them.
- Share their observations on the presentations.

PHASE 4:

- Seriously carry out the reflection required and take notes.
- Participate actively in the sharing of information and discussions.

PHASE 5:

- Draw up the list requested, making an effort to be objective.
- Be willing to discuss their self-evaluation with the teacher.

MODULE 11: PROFESSIONAL ETHICS

Code: 754 511

Duration: 15 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will be able to apply the rules of professional ethics.

SPECIFICATIONS

At the end of this module, the students will:

- Be familiar with the laws governing the practice of dental medicine and the ensuing obligations.
- Be familiar with the professional behaviour required to practise the occupation of dental assistant.

LEARNING CONTEXT

PHASE 1: Familiarization with the Laws Governing the Practice of Dental Medicine

- Attending a presentation to become informed about provisions of various laws affecting the practice of dental medicine, including: the *Dental Act* the *Consumer Protection Act*, the *Food and Drugs Act*, the *Youth Protection Act*, and the *Charter of Human Rights and Freedoms*. Taking notes.
- Participating in a group meeting to discuss the duties and obligations of members of professional corporations, using notes taken previously and referring to the following topics: the right to practise, professional responsibility, protection of the public, professional inspection, delegated tasks. Taking notes.
- Using the notes taken, and working alone, drawing up a list of the obligations imposed on dentists by various laws.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PHASE 2: Familiarization with the Professional Behaviours Required to Practise the Occupation of Dental Assistant

- Discussing in small groups the professional behaviours that dental assistants must adopt in the exercise of their functions, using information acquired during the activities in Phase 1 and personal experience. Referring to the following topics: image of the office, communication, protocol, competency, respect for clients, files, collection of fees, access to medications, professional responsibility, limits of the assistant's function. Taking notes.
- Drawing up, individually, a list of professional behaviours appropriate to each of the proposed topics, using notes taken during the small group activity.
- Participating in a group discussion of professional behaviours that dental assistants must adopt in the exercise of their functions.

PHASE 3: Evaluation of Their Aptitudes for the Professional Behaviours Required to Practise the Occupation

- Analyzing their behaviours individually, referring to the following points: dress and general grooming, language, politeness, communication with colleagues and superiors, respect for clients, observance of instructions received, discretion. Noting the results of this analysis.
- Participating in a learning context illustrating the routine of a day's work in a dentist's office; practising the adoption of professional attitudes appropriate to the situation.
- Evaluating their aptitudes for the professional behaviours required in the practice of the occupation, using notes taken and referring to behaviours displayed during the learning context. Recording their strengths and weaknesses.
- Discussing their self-evaluation with the teacher and looking for possible ways to make improvements.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

INSTRUCTIONAL GUIDELINES

The teacher should:

- Make sure in advance that materials necessary for the activities are available.
- Prepare the learning contexts.
- Provide support for small-group activities.
- Encourage discussion and make sure that all students have an opportunity to express themselves during information-sharing sessions.
- Make sure that each student understands the responsibilities involved in the role of each member of a dental care team.
- Collect notes in order to evaluate students' participation.

PARTICIPATION CRITERIA

PHASE 1:

- Attend the presentation and take notes.
- Participate in the group discussion.
- Draw up a complete list of obligations required of dentists by various laws.

PHASE 2:

- Participate actively in small-group activities and take notes.
- Draw up the list requested.
- Participate actively in discussions.

PHASE 3:

- Carry out the analysis requested in a serious manner and make notes.
- Try to present a professional image during the learning context.
- Try to identify their strengths and weaknesses in the area of professional behaviour.
- Be willing to discuss their self-evaluation with the teacher and look for ways of making improvements.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Define the following terms: law, regulation, code, delegation of tasks, duties, obligations, ethics.
2. Distinguish between a professional corporation and a professional association.
3. Identify the types of lawsuits that can be filed for professional negligence.

MODULE 12: PREPARATION OF MATERIALS FOR DENTAL TREATMENTS

Code: 754 527

Duration: 105 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **prepare materials required for various dental treatments** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working individually
- By means of learning contexts
- Using materials appropriate to various dental treatments

GENERAL PERFORMANCE CRITERIA

- Observance of rules of asepsis and safety
- Functional arrangement of materials in preparation for different treatments
- Efficient performance of tasks

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Prepare the materials required to perform various treatments in operative dentistry.

B. Prepare the materials required for various prosthodontic treatments.

SPECIFIC PERFORMANCE CRITERIA

- Presence of basic instruments in the instrument tray, arranged in proper order, as well as any hand instruments and special accessories needed for the treatment to be administered
- Presence of rotary instruments, equipment and accessories in their proper places in the assistant's work area, as well as all dental materials and other commercial materials necessary to the treatment
- Proper preparation of the anaesthetic kit according to the area to be treated, instructions received and techniques to be used
- Proper preparation of the rubber dam according to the area and tooth to be treated and the technique to be used
- Proper preparation of the matrix band according to the area and tooth to be treated and the technique to be used
- Presence of basic instruments in the instrument tray, arranged in proper order, as well as any hand instruments and special accessories needed for the treatment to be administered

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

C. Prepare the materials required to perform an endodontic treatment.

**SPECIFIC PERFORMANCE
CRITERIA**

- Presence of rotary instruments, equipment and accessories in their proper places in the assistant's work area, as well as all dental materials and other commercial materials necessary to the treatment
- Proper preparation of the anaesthetic kit according to the area to be treated, instructions received and techniques to be used
- Presence of basic instruments in the instrument tray, arranged in proper order, as well as any hand instruments and special accessories needed for the treatment to be administered
- Presence of rotary instruments, equipment and accessories in their proper places in the assistant's work area, as well as all dental materials, medication and other commercial materials necessary to the treatment
- Proper preparation of the anaesthetic kit according to the area to be treated, instructions received and techniques to be used
- Proper preparation of the rubber dam according to the area and tooth to be treated and the technique to be used

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Prepare the materials required for various treatments in dental surgery.

E. Prepare the materials required for various periodontic treatments.

SPECIFIC PERFORMANCE CRITERIA

- Presence of basic instruments in the instrument tray, arranged in proper order, as well as any hand instruments and special accessories needed for the treatment to be administered
 - Presence of rotary instruments, equipment and accessories in their proper places in the assistant's work area, as well as all dental materials, medication and other commercial materials necessary to the treatment
 - Proper preparation of the anaesthetic kit according to the area to be treated, instructions received and techniques to be used
 - Assembly of scalpel blade, according to technique to be used
-
- Presence of basic instruments in the instrument tray, arranged in proper order, as well as any hand instruments and special accessories needed for the treatment to be administered
 - Presence of rotary instruments, equipment and accessories in their proper places in the assistant's work area, as well as all dental materials, medication and other commercial materials necessary to the treatment

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

F. Prepare the materials required for various orthodontic treatments.

**SPECIFIC PERFORMANCE
CRITERIA**

- Proper preparation of the anaesthetic kit according to the area to be treated, instructions received and techniques to be used
- Assembly of scalpel blade, according to technique to be used
- Appropriate choice of hand instruments according to the type of treatment
- Appropriate choice of orthodontic accessories and dental materials, according to the type of treatment and instructions received

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Recognize the rotary instruments (handpieces) used in dentistry.
2. Identify the safety measures appropriate to the use of rotary instruments.
3. Recognize the different parts of hand instruments.
4. Recognize the basic instruments used in dentistry.
5. Recognize the different accessories and commercial materials used for dental treatments, and their uses.
6. Review the names, numbers and surfaces of teeth, as well as the different classes of cavities.
7. Associate the selection of needles with different injection sites for anaesthetic.

Before learning how to prepare the materials required to perform various treatments in operative dentistry (A):

8. Review the treatments carried out in operative dentistry.
9. Recognize the hand instruments used in operative dentistry.
10. Recognize the various types of matrix band used in operative dentistry.
11. Review the different materials used in operative dentistry.

Before learning how to prepare the materials required for various prosthodontic treatments (B):

12. Review the different prosthodontic treatments.
13. Review the different dental materials used in prosthodontics.
14. Recognize the hand instruments and accessories specific to prosthodontics.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to prepare the materials required to perform an endodontic treatment (C):

15. Review the different steps of an endodontic treatment.
16. Identify the categories of medication used in endodontics.
17. Recognize the hand instruments and accessories specific to endodontics.
18. Recognize the different dental materials used in endodontics.

Before learning how to prepare the materials required for various treatments in dental surgery (D):

19. Review the different treatments in dental surgery.
20. Identify the medications used in dental surgery.
21. Recognize the hand instruments and accessories specific to dental surgery.

Before learning how to prepare the materials required for various periodontic treatments (E):

22. Review the different periodontic treatments.
23. Identify the medications used in periodontics.
24. Recognize the hand instruments and accessories specific to periodontics.
25. Recognize the characteristics of a well-sharpened instrument.
26. Sharpen periodontic instruments.
27. Recognize the different materials used in periodontics.

Before learning how to prepare the materials required for various orthodontic treatments (F):

28. Review the different orthodontic treatments.
29. Recognize the hand instruments and accessories specific to orthodontics.
30. Recognize the different materials used in orthodontics.

MODULE 13: CHAIR-SIDE ASSISTANCE IN OPERATIVE DENTISTRY

Code: 754 538

Duration: 120 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply techniques of chair-side assistance in operative dentistry** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working in learning contexts
- Using the appropriate equipment and materials
- Using a mannequin as a client during application of techniques of chair-side assistance

GENERAL PERFORMANCE CRITERIA

- Observance of the order of steps for the various techniques carried out
- Observance of the rules of asepsis, safety and professional ethics
- Observance of principles of communication

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

A. Plan one's work.

B. Prepare the treatment room and the materials.

**SPECIFIC PERFORMANCE
CRITERIA**

- Presence of all dental records required, in proper order, according to the appointment book or route sheet
- Proper measures taken to ensure adequate supplies of sterile instruments and accessories, according to the appointment book or route sheet
- Startup of compressors and equipment required for the treatments to be administered
- Appropriate arrangement of dental record components to facilitate consultation
- Application of appropriate measures of asepsis and safety
- Selection, preparation and proper arrangement of instruments, accessories and commercial materials required to carry out the treatment
- Proper assembly and installation of handpieces and burs
- Appropriate arrangement of the movable components of the treatment room to ensure comfort and safety

[illegible]

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

C. Welcome the client.

SPECIFIC PERFORMANCE CRITERIA

- Use of appropriate polite greetings
- Relevance of questions asked in order to open or update the dental record
- Proper seating of the client
- Application of appropriate measures of asepsis and safety throughout the treatment
- Adoption and maintenance of an appropriate working position for the duration of the treatment
- Anticipation of the dentist's needs regarding instruments and accessories to be handed to him or her
- Proper lighting of the operating area throughout the treatment
- Proper exchange of the anaesthetic kit
- Appropriate assistance during installation and removal of the dental dam
- Proper application, at the appropriate times, of suction techniques and techniques for using water and air syringes
- Proper application of techniques for exchanging instruments:
 - proper timing and quick responses
 - proper positioning of fingers
 - proper position of the operative end of an instrument
- Correct preparation, mixing, consistency and arrangement of dental materials required for the treatment

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

E. Carry out maintenance of materials, equipment and the treatment room.

SPECIFIC PERFORMANCE CRITERIA

- Proper application of polymerization technique for dental materials to be polymerized
- Proper arrangement of the materials required to verify occlusion
- Constant attention to the well-being of the patient throughout the treatment
- Appropriate updating of patient's record, according to the treatment carried out
- Communication of post-operative advice appropriate to the treatment
- Proper removal of disposable materials
- Proper determination of which instruments and accessories to be sterilized, as well as types of equipment to use for this
- Application of appropriate measures of asepsis and safety
- Proper preparation of materials to be sterilized:
 - cleaning of accessories
 - lubrication of handpieces
 - proper bagging and labelling of instruments or placement in correct order on the tray
- Proper application of sterilization procedures
- Proper disinfection of materials that cannot be sterilized
- Proper maintenance of the evacuation systems of the dental unit

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

- Shutdown of compressors and other equipment that has been in use
- Order and cleanliness of the work area

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to plan one's work (A):

1. Explain the importance of planning in a dentist's office.
2. Give reasons for the need for a sufficient daily quantity of sterile instruments and accessories in a dentist's office.
3. Review the rules of professional ethics pertaining to the administration of dental care.

Before learning how to prepare the treatment room and the materials (B):

4. Define the function of the compressors used in a dentist's office, as well as how to use and maintain them.
5. Review the dangers of using contaminated instruments, accessories or materials in a dentist's office.

Before learning how to apply the techniques of chair-side assistance related to various restoration treatments (D):

6. Identify the dangers related to installing a rubber dam.
7. Recognize the general rules pertaining to exchange of instruments with regard to safety and efficiency.

Before learning how to carry out maintenance of materials, equipment and the treatment room (E):

8. Explain the consequences of forgetting to shut off the compressors, the dental unit and other equipment.
9. Review the importance of properly cleaning the evacuation system of the dental unit.

MODULE 14: ADMINISTRATIVE TASKS

Code: 754 545

Duration: 75 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **perform administrative tasks** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Concentrating on tasks performed in a dentist's office only
- Making use of learning contexts
- Using the appropriate materials and equipment: accounting books, lists of oral treatments and their fees, RAMQ printer, dictionary, grammar reference

GENERAL PERFORMANCE CRITERIA

- Observance of rules of layout and writing

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Write letters and memos.

*Survival of the fittest
presentation of
the patient's
case as a priority*

B. Plan appointments using a dental office management system.

C. Compile patients' records.

SPECIFIC PERFORMANCE CRITERIA

- Observance of rules pertaining to the appearance and composition
- Assembly of all information required, according to type of correspondence
- Appropriate determination of the number of appointments and their times, according to each type of treatment to be given, factors affecting the timing of appointments and dental follow-up of the patient
- Records in the appointment book of all supplementary information required
- Consistency between entries in the route sheet and in the appointment book
- Relevant questions asked in order to complete the client's dental record and medical record
- Proper notation in the record of all required information
- Proper assembly of the file folder according to the filing system used, the pre-determined colour codes and the usual arrangement of components of the record

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Accept fees for dental care.

SPECIFIC PERFORMANCE CRITERIA

- Accuracy and relevance of questions asked and information supplied according to different types of client, the cost of treatments, payment policies of the office and previous agreements, where applicable
- Proper handling of the following methods of payment:
 - cash
 - cheque
 - credit card
- Issue of a proper RAMQ claim, according to type of person covered, the fees to be reimbursed for the treatments received and the standards to be observed
- Entry, on a personal dental insurance formula, of all information requested, according to the treatments received and the insurance plan
- Issue of a statement and a receipt containing all relevant information, according to the facts in the record

E. Record daily operations in the general ledger.

- Consistency between entries in the ledger and the day's treatments
- Observation of the rules pertaining to the writing of entries in account books
- Consistency between amounts received and amounts recorded
- Correct totals of amounts recorded in each column

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

F. Prepare a bank deposit.

- Proper assembly of cash, cheques and credit card receipts received
- Accuracy of amounts recorded on deposit slip in relation to those in the general ledger

G. Balance the petty cash.

- Correct total of vouchers
- Correct amount on cheque written to re-balance the petty cash, according to the pre-determined amount

H. Manage stock inventory.

- Agreement between inventory and remaining stock, taking into account expired products
- Correct quantities ordered according to office policy and current needs
- Deliveries appropriately verified
- Proper classification of material, bills and material safety data sheets

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Recognize the features of the most common dental office management systems and their particular applications.

Before learning how to write letters and memos (A):

2. Recognize the different types of business letters commonly used in a dentist's office.
3. Identify the features of a letter and a memo.

Before learning how to plan appointments using a dental office management system (B):

4. Recognize the factors affecting the management of appointments in a dentist's office.
5. Explain the importance in appointment management of having a waiting list available.
6. Recognize the rules pertaining to the planning of dental care follow-up.
7. Relate the system of follow-up calls to the efficiency of a dental office.
8. Recognize the measures to be taken in cases of broken appointments.

Before learning how to compile patients' records (C):

9. Recognize the components of a patient's record and the information that must be contained in it.
10. Describe alphabetical and alphanumerical filing systems.

Before learning how to accept fees for dental care (D):

11. Identify the different methods of payment in a dentist's office.
12. Recognize precautions to be taken when accepting payment for accounts.
13. Describe the function and contents of various accounting forms used in a dentist's office: e.g. bill, receipt, statement, cheque.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

14. Identify the amounts of fees for dental services reimbursable to certain clients by the *Régie de l'Assurance maladie du Québec (RAMQ)*.
15. Describe the most common procedures for collecting from private insurance companies.
16. Identify the verifications that must be made regarding use of the Québec health insurance card, credit cards and the claims booklet of income security recipients.

Before learning how to record daily operations in the general ledger (E):

17. Define bookkeeping and state its objectives.
18. Define the following terms: debit, credit, balance.
19. Identify the entries to be made in the general ledger.
20. Use a calculator.
21. Recognize the features of accounting forms.

Before learning how to balance the petty cash (G):

22. Recognize precautions to be taken concerning the petty cash.

Before learning how to manage stock inventory (H):

23. Explain the importance of verifying the expiry dates of dental products at regular intervals and during inventory.
24. Relate to current practice the need for comparing prices of several suppliers before making purchases.
25. Define stock rotation and state its purpose.

MODULE 15: PREVENTION AND TREATMENT-PLANNING TASKS

Code: 754 558

Duration: 120 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **perform tasks related to prevention and treatment planning** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Making use of learning contexts
- On a mannequin, or on a client, depending on the task to be performed
- Using the appropriate materials and products

GENERAL PERFORMANCE CRITERIA

- Logical, well-supported explanations
- Use of appropriate terminology
- Observance of principles of communication
- Observance of rules of hygiene, asepsis and safety
- Efficient performance of tasks
- Appropriate storage of materials and maintenance of the work area

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Perform tasks related to dental X-ray photography.

B. Polish and apply fluoride to the crowns of the teeth.

SPECIFIC PERFORMANCE CRITERIA

- Proper seating of the client, according to the technique being used and safety considerations
- Appropriate selection and assembly of arm and film, according to the technique being used, the area to be X-rayed and the age of the patient
- Proper adjustment of exposure time
- Correct positioning of X-ray film
- Correct positioning of the arm according to the tooth being treated and the technique being used
- Proper application of the following techniques:
 - manual or automatic development of films
 - duplication of X-rays
 - mounting of X-rays
- Appropriate quality of X-rays according to geometric features and criteria required for an accurate diagnosis
- Proper labelling and classification of X-rays
- Proper maintenance of equipment used

- Selection and correct arrangement of instruments, accessories and commercial materials required for polishing and topical application of fluoride
- Proper seating of the client
- Logical explanations offered concerning dental care

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

C. Seal pits and dental fissures.

SPECIFIC PERFORMANCE CRITERIA

- Application of proper polishing technique with respect to the following points:
 - support points
 - order of steps to be followed
 - rotary speed of the handpiece
 - position and pressure of the polishing cup and the polishing strip
 - irrigation of the mouth
- Correct use of technique for topical application of fluoride, with respect to the following points:
 - order of steps to be followed
 - preparation of teeth
 - quantity of fluoride used and precautions taken to avoid swallowing
 - length of fluoridation time
- Appropriate advice given to ensure the effectiveness of the treatment
- Selection and correct arrangement of instruments, accessories and commercial materials required for application of the technique
- Logical explanations offered concerning the treatment
- Correct application of each step in the technique:
 - preparation of the dental surface (polishing, insulation, drying, acid etching)
 - application of the sealing agent
 - polymerization, where required

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Instruct patients on dental care techniques and habits to help maintain good oral health.

SPECIFIC PERFORMANCE CRITERIA

- Proper quality of sealing:
 - no air bubbles
 - no excess resin
 - perfect adherence of resin to the tooth
- Appropriate choice of brush and technique, according to age of the patient, condition of the mouth and the diagnosis
- Proper demonstration of the selected technique
- Evaluation of the patient's application of the technique, and appropriate corrections, where necessary
- Appropriate selection of dental floss, according to points of contact and space between the teeth
- Proper demonstration of technique for using dental floss
- Evaluation of patient's use of dental floss and appropriate corrections, if necessary
- Proper demonstration of methods for using commonly used therapeutic aids:
 - for brushing
 - for flossing
 - for gum stimulation
- Appropriate explanation of how to prepare a mouthwash, according to the condition of the mouth
- Correct demonstration of mouthwash technique

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

E. Instruct patients on procedures for maintaining fixed and movable dentures and orthodontic appliances.

**SPECIFIC PERFORMANCE
CRITERIA**

- Evaluation of patient's mouthwash technique and appropriate corrections, if necessary
- Communication of appropriate general advice concerning oral health techniques and eating habits affecting oral health
- Appropriate selection of maintenance methods according to type of denture or appliance
- Appropriate selection of brush and accessories, according to type of denture or appliance
- Observance of manufacturer's instructions for product used for soaking
- Proper demonstration of maintenance techniques appropriate to each type of denture or appliance
- Correct evaluation of patient's application of technique and appropriate corrections, if necessary
- Communication of appropriate advice about maintenance, according to the condition of the mouth

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Define the different types of prevention: primary, secondary, tertiary.
2. Give reasons for the dentist's presence while the assistant is performing tasks related to prevention and treatment planning.

Before learning how to perform tasks related to dental X-ray photography (A):

3. Define the following terms: radiation, radiology, X-ray photography, Roentgen rays, milliamperage, kilovoltage, electron, dose, primary radiation, secondary radiation, ionizing radiation, radiation leak, diffuse radiation, utility radiation, collimation, X-ray viewer, radiation protection, developer, fixing solution, dosimeter.
4. Define the properties of X-rays.
5. Describe the components of the X-ray-producing apparatus.
6. Explain the importance of X-rays in dental medicine.
7. Recognize the dangers to the human body of X-rays and the doses of exposure that produce biological effects (somatic or genetic).
8. Recognize the factors of sensitivity to X-rays.
9. Identify the measures used to protect the patient and the assistant against radiation.
10. Describe the components of films used to take dental X-rays.
11. Describe the method for opening a package containing X-ray film.
12. Associate different sizes of film with their uses.
13. Distinguish among intraoral and panoramic film and cephalograms.
14. Recognize the precautions to be taken in storing, handling and developing films.
15. Identify the factors that determine the quality of X-ray photographs.
16. Distinguish between parallel and bisecting-angle techniques.
17. Compare manual and automatic development techniques.

Before learning how to polish and apply fluoride to the crowns of the teeth (B):

18. Describe the properties of trace solutions, the methods for applying them and precautions to be taken with their use.
19. Distinguish the intrinsic and extrinsic causes of tooth discoloration.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

20. State the purpose of polishing.
21. Compare different types of prophylactic paste.
22. Describe the different steps involved in both contra-angle and Prophy-jet polishing techniques.
23. Recognize the different support points for instruments in the mouth.
24. Recognize the different prophylactic contra-angles and their accessories.
25. Recognize the dangers of using prophylactic and Prophy-jet contra-angles and the precautions to be taken because of these dangers.
26. State the purpose of applying fluoride.
27. Review the different types of fluoride and recognize them according to their format.
28. Describe the method for applying different types of fluoride.

Before learning how to seal pits and dental fissures (C):

29. Review the location of dental pits and fissures.
30. State the indications and counter-indications for sealing dental pits and fissures.
31. Give the reason for using a non-fluoride polishing agent before applying sealer to pits and fissures.
32. Review the characteristics of the different sealers.
33. Recognize the different factors affecting duration of adherence for a sealing agent.

Before learning how to instruct patients on dental care techniques and habits to help maintain good oral health (D):

34. Relate salivary pH to oral health.
35. Explain the consequences of the accumulation of dental plaque.
36. Distinguish between mineralized and non-mineralized dental deposits, and state their causes.
37. Compare different types of toothbrushes, dental floss and therapeutic adjuvants.
38. Describe different techniques for brushing teeth: Bass, Rouleau, modified Stillman, Charters, modified Bass, Fones, Léonard, Smith and mixed.
39. Compare different types of toothpaste according to their basic ingredients, properties and uses.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

40. Recognize areas of the mouth requiring special attention when brushing.
41. Associate frequency of brushing with age and oral health.
42. List the agents used in the fabrication of commercial mouthwashes and their purposes.
43. State the various uses of homemade mouthwashes based on salt or baking soda.
44. Prepare the following mouthwash formulas: sodium chloride isotonic, sodium chloride hypertonic, chloride and sodium bicarbonate.
45. Define the following terms: nutrition, nutrients, nutritional deficiency.
46. State the main sources and the function of the following nutrients: proteins, amino acids, fats, carbohydrates, vitamins, minerals, water.
47. Describe the composition of the daily diet recommended in the *Canada Food Guide*.
48. Associate nutrients with good dental health.
49. Associate under-consumption and over-consumption of nutrients with oral health problems.
50. Identify cariogenic and non-cariogenic categories of foods.
51. State the selection criteria for healthy snacks in terms of dental health.
52. Associate the following diets with particular oral conditions: liquid diet, soft-food diet, semi-soft-food diet.
53. State the principal foods that possess cleaning properties.
54. Associate various oral health problems with the eating habits that usually cause them.

Before learning how to instruct patients on procedures for maintaining fixed and movable dentures and orthodontic appliances (E):

55. State the characteristics of brushes used for maintaining dentures and fixed and removable orthodontic appliances.
56. List products for softening accumulations on dentures and orthodontic appliances before brushing.

MODULE 16: PLANNING A JOB SEARCH

CODE: 754 561

Duration: 15 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will learn how to **plan a job search.**

SPECIFICATIONS

At the end of this module, the students will:

- Be familiar with the employment opportunities for dental assistants.
- Be familiar with the steps involved in looking for a job.
- Know how to write a curriculum vitae and a covering letter.
- Have an understanding of interview procedures.

LEARNING CONTEXT

PHASE 1: Familiarization with Job Search Procedures

- Participating in an information meeting on the particular features of jobs open to dental assistants and on the different categories of establishments in which dental assistants work. Taking notes.
- Reflecting individually, using notes taken, on the possibilities offered by the job market, taking into account their interests and personalities. Attempting to establish a first choice concerning the type of job desired (e.g. secretary-assistant, chair-side assistant, coordinator, laboratory assistant, treatment room assistant). Deciding which type of establishment is best suited to their personality (e.g. individual practice or group clinic, generalist or specialist, polyclinic, hospital clinic, university clinic). Writing down these reflections.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PHASE 1 (cont'd);

- Participating in a group discussion of the following aspects of the procedure: sources of information; steps in a job search; time required to complete each step and the effect of this on planning a job search; special features of seeking a job as dental assistant; minimum working conditions. Taking advantage of this discussion to ask any questions that may have arisen in the previous activity.

PHASE 2: Introduction to Writing a Curriculum Vitae and a Covering Letter

- Participating in an activity in which models of curriculum vitae and covering letters are analyzed, in small groups.
- Participating in a group discussion of the content and qualities of a curriculum vitae and a covering letter, and of ways of highlighting one's strengths in these documents.
- Individually, writing a curriculum vitae and a covering letter to answer an announcement of a job opening for a dental assistant.
- In teams of three, evaluating the quality of documents produced by members of the team and submitting this evaluation to the teacher.

PHASE 3: Familiarization with the Procedure of an Interview

- Participating in a group discussion of the procedures for the three steps of an interview: establishing a cordial rapport, exchanging information, arranging for a follow-up meeting. Afterwards, discussing points used as evaluation criteria by the employer during the interview.
- Participating in simulated interviews and writing down observations on each presentation, using topics from the earlier group discussion.
- Discussing, in a large group, observations noted and ways of improving one's performance.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

INSTRUCTIONAL GUIDELINES

The teacher should:

- Supply students with all relevant reference materials.
- Support the activities of small groups.
- Lead group meetings.
- Encourage individual expression.
- Organize activities involving simulated job interviews, so that each student benefits from the experience.

PARTICIPATION CRITERIA

PHASE 1:

- Display an interest in the information provided and take notes.
- Carry out the self-evaluation required and take notes.
- Participate actively in the discussion.

PHASE 2:

- Examine the documents presented.
- Voice an opinion during discussions.
- Show diligence in drawing up documents.
- Participate actively in evaluating documents produced.

PHASE 3:

- Participate actively in group discussions.
- Demonstrate a serious attitude during simulated interviews.
- Write up observations on the quality of simulated interviews.
- Agree to discuss one's own performance and look for ways of making improvements.

MODULE 17: DENTAL LABORATORY TECHNIQUES

Code: 754 578

Duration: 120 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply dental laboratory techniques** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working individually
- Using the appropriate materials
- Using specific data
- Without the help of reference documents

GENERAL PERFORMANCE CRITERIA

- Proper application of the various techniques
- Proper use of equipment
- Observance of rules of hygiene, asepsis and safety
- Appropriate maintenance of equipment, accessories and workstation

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Pour up and trim the study models used in a dentist's office.

SPECIFIC PERFORMANCE CRITERIA

- Proper preparation of the work area
- Appropriate choice of instruments accessories and materials
- Correct preparation of the impression in order to obtain a smooth model, without flaws
- Proper preparation and mixing of materials, according to manufacturer's instructions
- Proper application of pouring technique according to type of model required:
 - without teeth
 - partially without teeth
 - with teeth
- Proper application of technique for unmolding and trimming the study model
- Appropriate quality of models produced:
 - smooth, soft texture
 - uniform colour
 - no seam between the base and the impression
 - no excess material or air bubbles on the anatomical forms of the model
 - proper thickness of the base
 - presence of all structures found in the impression
- Proper labelling of the models

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

B. Make customized impression trays.

SPECIFIC PERFORMANCE CRITERIA

- Proper preparation of the work area
- Appropriate choice of instruments, accessories and materials
- Proper preparation of the model
- Correct molding of the wax on the model
- Proper preparation and mixing according to materials used and manufacturer's instructions
- Proper application of molding technique according to model, instructions received and manufacturer's instructions
- Proper use of unmolding, rough finishing and polishing processes
- Appropriate quality of impression tray produced:
 - smooth texture, without rough patches
 - uniform colour
 - correct size and position of tray handle and notches
 - correct thickness according to type of impression tray
 - proper location of perforations, according to the type of impression tray
 - appropriate spacing of frenum and muscle insertions

C. Make baseplates.

- Proper preparation of the working area
- Appropriate choice of instruments, accessories and materials

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Make wax rims on a baseplate.

SPECIFIC PERFORMANCE CRITERIA

- Correct preparation of the final model according to instructions received and technique
- Proper application of pouring technique according to material used
- Proper performance of rough trimming and polishing, according to the model
- Appropriate quality of finished baseplate:
 - smooth, soft texture around edges
 - rough surface of the alveolar ridge
 - correct thickness
 - stability and adherence to the final model
- Proper preparation of the work area
- Appropriate choice of instruments, accessories, and materials
- Application of proper technique for molding wax rims
- Appropriate quality of wax rim produced and its mounting on the baseplate:
 - no air bubbles and sealing of wax rims
 - no seam line between the wax rim and the baseplate
 - proper angle in relation to the maxilla
 - conformity with the pre-determined height and width

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

E. Make crowns and temporary bridges.

- smooth finish, with no rough patches
- no wax residue on the baseplate or the model
- Proper preparation of the work area
- Appropriate choice of instruments, accessories and materials
- Proper performance of all steps for making models, according to the technique used:
 - shell
 - impression
- Proper handling of materials used
- Appropriate quality of finished crown and temporary bridge:
 - soft, smooth texture
 - proper gum and bite adjustment on the model
 - no air bubbles, perforations or flaws
 - uniform thickness
 - space between the pontic and the tissues

F. Make mouth guards and night guards.

- Proper preparation of materials
- Correct perforation of model guard prepared, if necessary
- Proper application of technique, according to the item to be produced
- Appropriate quality of mouth guard or night guard:
 - smooth, soft texture
 - no flaws around edges

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE	
SPECIFICATIONS OF THE EXPECTED BEHAVIOUR	SPECIFIC PERFORMANCE CRITERIA
G. Clean and polish dentures.	- Proper choice of cleaning and polishing agents, according to the condition of the denture - Appropriate choice of materials - Proper application of cleaning and polishing techniques - Quality of cleaning and polishing

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Describe the equipment and accessories used in a dental laboratory and associate them with various techniques.
2. Associate safety measures with the use of all dental laboratory equipment.
3. Explain the importance of observing the safety rules appropriate to work done in a dental laboratory.
4. Describe the maintenance of equipment and accessories in a dental laboratory.

Before learning how to pour up and trim the models used in a dentist's office (A):

5. Review the materials most commonly used in pouring up models and their respective applications.
6. Describe the methods for using model-pouring equipment and accessories.
7. Describe the various methods used for pouring up and trimming models.

Before learning how to make customized impression trays (B):

8. Review the materials used in the fabrication of customized impression trays.
9. Describe the special features of making customized impression trays, according to different types of denture.

Before learning how to make baseplates (C):

10. Review the materials used for making baseplates.
11. Describe the techniques for making baseplates.
12. Describe methods for using equipment and accessories used in the fabrication and finishing of baseplates.

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to make wax rims on a baseplate (D):

13. Review the different formats and features of waxes used in the fabrication of wax rims.
14. Describe the techniques for making wax rims.
15. Describe the methods for using the equipment and accessories employed in the fabrication of wax rims.

Before learning how to make crowns and temporary bridges (E):

16. Review the materials commonly used in the fabrication of crowns and temporary bridges.
17. Describe techniques for the fabrication of crowns and temporary bridges.
18. Review the importance of the selection of colour for the materials used in making crowns and temporary bridges.
19. Describe the methods for using equipment and accessories employed in the fabrication of crowns and temporary bridges.

Before learning how to make mouth guards and night guards (F):

20. State situations requiring the wearing of mouth guards and night guards.
21. Describe the techniques for making mouth guards and night guards.

Before learning how to clean and polish dentures (G):

22. Explain the need to clean and polish dentures in a dental laboratory.
23. State the products for cleaning and polishing dentures.
24. Describe the different techniques for cleaning and polishing dentures.

MODULE 18: CHAIR-SIDE ASSISTANCE: SPECIALIZED DENTISTRY

Code: 754 588

Duration: 120 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply techniques of chair-side assistance in specialized dentistry** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Making use of learning contexts
- Using the appropriate equipment and materials
- Using a mannequin as a client during application of techniques of chair-side assistance

GENERAL PERFORMANCE CRITERIA

- Observance of the order of steps in the different techniques
- Proper use of equipment
- Observance of the rules of asepsis, safety and professional ethics
- Observance of principles of communication
- Efficient performance of tasks

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Plan the work to be done.

B. Prepare the treatment room and the materials.

C. Welcome the patient.

SPECIFIC PERFORMANCE CRITERIA

- Presence of all dental records required, in proper order, according to the appointment book or route sheet
- Proper measures taken to ensure adequate supplies of sterile instruments and accessories, according to the appointment book or route sheet
- Appropriate arrangement of dental record components to facilitate consultation
- Application of appropriate measures of asepsis and safety
- Selection, preparation and proper arrangement of instruments, accessories and commercial materials required to carry out the treatment
- Proper assembly and installation of handpieces and burs
- Appropriate arrangement of the movable components of the treatment room to ensure comfort and safety
- Use of appropriate polite greetings
- Relevance of questions asked in order to update the dental record

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Perform the tasks of chair-side assistance in specialized dentistry.

SPECIFIC PERFORMANCE CRITERIA

- Proper seating of the client
- Application of appropriate measures of asepsis and safety
- Adoption and maintenance of an appropriate working position for the duration of the treatment
- Anticipation of the dentist's needs regarding instruments and accessories to be handed to him or her
- Proper lighting of the operating area
- Proper exchange of the anaesthetic kit
- Appropriate assistance during installation and removal of the dental dam
- Correct performance of tasks related to the taking and developing of X-rays
- Proper assembly of the scalpel blade
- Proper application of techniques for exchanging instruments:
 - proper timing and quick responses
 - proper positioning of fingers
 - proper position of the operative end of an instrument
- Appropriate presentation of forceps
- Proper application, at the appropriate times, of suction techniques and techniques for using water and air syringes

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

E. Carry out maintenance of materials, equipment and the treatment room.

SPECIFIC PERFORMANCE CRITERIA

- Correct preparation, mixing, consistency and arrangement of dental materials required for the treatment
- Proper lining of the impression tray, according to the material used
- Proper assistance provided during the taking of impressions
- Correct production of laboratory items required according to type of treatment
- Constant attention to the well-being of the patient throughout the treatment
- Appropriate updating of patient's record, according to the treatment carried out
- Communication of post-operative advice appropriate to the treatment
- Proper removal of disposable materials
- Proper determination of which instruments and accessories to be sterilized, as well as types of equipment to use for this
- Application of appropriate measures of asepsis and safety
- Proper preparation of materials to be sterilized:
 - cleaning of instruments and accessories
 - lubrication of handpieces
 - proper bagging and labelling of instruments or placement in correct order on the tray

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

- Proper application of sterilization procedures
- Proper disinfection of materials and accessories that cannot be sterilized
- Proper maintenance of the evacuation systems of the dental unit
- Order and cleanliness of the work area

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before learning how to plan the work to be done (A):

1. Explain the importance of having on hand, at the right time, all accessories that have been fabricated in an internal or external laboratory for various dental treatments.

Before learning how to prepare the treatment room and the materials (B):

2. Describe the technique for preparing the dental dam in endodontics.

Before learning how to perform the tasks of chair-side assistance in specialized dentistry (D):

3. Describe the special techniques used for exchanging instruments in specialized dentistry.
4. Describe the different oral-dental situations that may require the taking of an impression.

MODULE 19: ASSISTANCE IN OPERATIVE DENTISTRY, ORTHODONTICS AND PEDODONTICS

Code: 754 598

Duration: 120 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **assist in operative dentistry, orthodontics and pedodontics** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- In an office or clinic providing treatments in the fields of operative dentistry, orthodontics and pedodontics
- Under real working conditions
- Using the appropriate equipment and materials
- Working independently

GENERAL PERFORMANCE CRITERIA

- Proper application of techniques
- Full observance of rules of hygiene, asepsis and safety
- Observance of office policies and rules of professional ethics
- Observance of principles of communication and teamwork
- Proper use of equipment
- Demonstration of initiative, capacity for observation, self-discipline and ability to cope with unforeseen or unusual situations
- Efficient performance of tasks

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

- A. Plan the work to be done.

- B. Prepare the treatment room and the materials.

SPECIFIC PERFORMANCE CRITERIA

- Logical planning according to the appointments of the day, treatments to be given and previous agreements with the dentist and his or her assistant

- Application of the following aseptic procedures:
 - washing hands
 - wearing gloves
 - disinfection of fixed components of the treatment room
- Presence of all necessary materials in the treatment room, according to:
 - type of treatment or step
 - medical history of the patient
 - instructions or established routine
- Appropriate arrangement of the materials, according to:
 - type of treatment or step
 - economy of time and movement
- Appropriate arrangement of dental record components and X-rays, where applicable

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

C. Welcome the patient.

D. Assist the dentist during the course of operative, orthodontic and pedodontic dental treatments.

SPECIFIC PERFORMANCE CRITERIA

- Proper use of standard polite greetings at the arrival and departure of the client
- Relevance of questions asked in order to update the patient's medical record, according to age and type of treatment to be administered
- Proper seating of the patient
- Application of appropriate measures of asepsis and safety
- Adoption and maintenance of an appropriate working position, according to the task being carried out
- Proper application of the following assistance techniques:
 - adjustment of equipment, installation of X-ray film and positioning of the arm
 - development of X-ray films
 - suction and use of air and water syringes
 - exchange of instruments
 - mixing of dental cements
 - mixing of filling materials
 - mixing of impression materials and lining of impression tray
 - pouring up and trimming of models, where necessary
- Proper use of a polymerizing lamp and an amalgamator
- Anticipation of the dentist's needs throughout the treatment
- Proper lighting of the operating area throughout the treatment

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

E. Carry out maintenance of materials, equipment, and the treatment room.

SPECIFIC PERFORMANCE CRITERIA

- Proper application of the following prevention techniques:
 - cleaning the crowns of the teeth
 - topical application of fluoride
 - sealing of pits and fissures
 - giving of instructions on general and special methods of oral hygiene
- Demonstration of self-confidence, delicacy and attention to detail when applying techniques
- Constant attention to the well-being of the patient
- Application of special techniques of approach used in pedodontics
- Appropriate updating of patient's medical record, according to treatment and preventive care administered and the policies of the office
- Communication of appropriate advice, according to type of care offered
- Correct preparation of final impressions for an external laboratory, where applicable
- Appropriate precautions taken, according to the task to be carried out
- Proper determination of instruments and accessories to be sterilized
- Correct preparation of instruments and accessories to be sterilized

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

F. Participate in the regular tasks of the dental assistant.

SPECIFIC PERFORMANCE CRITERIA

- Proper application of sterilization procedures, according to type of equipment being used
- Proper application of disinfection techniques, according to type of material
- Observance of procedures and regulations concerning the management of biomedical waste
- Economy of time and movement in performance of maintenance tasks
- Order and cleanliness of the work area
- Appropriate degree of participation, according to:
 - treatments being given
 - expressed or unexpressed needs
 - quiet periods

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Summarize the objectives of the practicum and its requirements.
2. Describe the physical organization and particular features of the practicum location.
3. State the policies of the dental office or clinic and compare them with the training requirements.
4. Associate each member of the dental team in the office or clinic with his or her particular role.
5. State any special features of the procedures current in the office or clinic concerning instruments, materials and treatment procedures in operative dentistry, orthodontics and pedodontics.
6. Review the dangers involved in any negligence regarding asepsis measures in a dental office.

MODULE 20: ASSISTANCE IN DENTAL SURGERY AND PROSTHODONTICS

Code: 754 606

Duration: 90 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **assist in dental surgery and prosthodontics** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- In an office or clinic providing treatments in the fields of dental surgery and prosthodontics
- Under real working conditions
- Using the appropriate equipment and materials
- Working independently

GENERAL PERFORMANCE CRITERIA

- Proper application of techniques
- Full observance of rules of hygiene, asepsis and safety
- Observance of office policies and rules of professional ethics
- Observance of principles of communication and teamwork
- Proper use of equipment
- Demonstration of initiative, capacity for observation, self-discipline and ability to cope with unforeseen or unusual situations
- Efficient performance of tasks

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE	
SPECIFICATIONS OF THE EXPECTED BEHAVIOUR	SPECIFIC PERFORMANCE CRITERIA
A. Plan the work to be done.	- Logical planning according to the day's appointments, expected treatments and previous agreements with the dentist and the regular assistant
B. Prepare the treatment room and the materials.	- Application of appropriate measures of asepsis and safety - Appropriate selection of instruments, accessories and commercial materials required, according to: • type of treatment or step • medical history of the patient • medical record data - Appropriate arrangement of instruments, accessories and commercial materials, according to: • type of treatment or step • instructions or dentist's usual procedures • economy of time and movement - Appropriate preparation of the dental record components and X-rays
C. Welcome the patient.	- Proper use of standard polite greetings at the arrival and departure of the client - Relevance of questions asked in order to update the patient's medical record

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Assist the dentist during dental surgery and prosthodontic treatments.

SPECIFIC PERFORMANCE CRITERIA

- Proper seating of the patient
- Application of appropriate measures of asepsis and safety
- Adoption and maintenance of an appropriate working position according to the task to be performed
- Anticipation of the dentist's needs
- Proper lighting of the operating area throughout the treatment
- Correct performance of tasks related to the taking and developing of X-rays
- Proper application of the following techniques:
 - preparation and exchange of the anaesthetic kit
 - suction and use of air and water syringes
 - exchange of instruments
 - assembly of the scalpel blade
 - positioning of the needle on the haemostat clamp
 - handling of impression materials and surgical cements
 - pouring up and trimming of models
 - production of required laboratory items
- Constant attention to the well-being of the patient
- Appropriate updating of patient's record, according to treatment administered and the policies of the office
- Communication of appropriate advice, according to type of treatment administered

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

E. Carry out maintenance of materials, equipment, and the treatment room.

F. Participate in the regular tasks of the dental assistant.

SPECIFIC PERFORMANCE CRITERIA

- Appropriate precautions taken pertaining to disinfection and sterilization
- Proper determination of instruments and accessories to be sterilized
- Correct preparation of instruments and accessories to be sterilized
- Proper application of sterilization procedures, according to type of equipment being used
- Proper application of disinfection techniques, according to type of material
- Observance of procedures and regulations concerning the management of biomedical waste
- Economy of time and movement in performance of maintenance tasks
- Order and cleanliness of the work area

- Appropriate degree of participation, according to:
 - treatments being given
 - expressed or unexpressed needs
 - quiet periods

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Summarize the objectives of the practicum and its requirements.
2. Describe the physical organization and particular features of the practicum location.
3. State the policies of the dental office or clinic and compare them with the training requirements.
4. Associate each member of the dental team in the office or clinic with his or her particular role.
5. State any special features of the procedures current in the office concerning instruments, materials and treatment procedures in dental surgery and prosthodontics.
6. Review the dangers involved in any negligence regarding asepsis measures in a dental office.

MODULE 21: ASSISTANCE IN ENDODONTICS AND PERIODONTICS

Code: 754 614

Duration: 60 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **assist in endodontics and periodontics** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- In an office or clinic providing treatments in the fields of endodontics and periodontics
- Under real working conditions
- Using the appropriate equipment and materials
- Working independently

GENERAL PERFORMANCE CRITERIA

- Proper application of techniques
- Full observance of rules of hygiene, asepsis and safety
- Observance of office policies and rules of professional ethics
- Observance of principles of communication and teamwork
- Proper use of equipment
- Demonstration of initiative, capacity for observation, self-discipline and ability to cope with unforeseen or unusual situations
- Efficient performance of tasks

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

A. Plan the work to be done.

B. Prepare the treatment room and the materials.

C. Welcome the patient.

SPECIFIC PERFORMANCE CRITERIA

- Logical planning according to the appointment book or the route sheet and the cases at hand
- Verification to ensure adequate supplies of sterile instruments and accessories, according to treatments to be given
- Application of appropriate measures of asepsis and safety
- Appropriate selection of instruments, accessories and commercial materials required, according to:
 - type of treatment or step
 - medical history of the patient
 - medical record data
- Appropriate arrangement of instruments, accessories and commercial materials, according to:
 - type of treatment or step
 - instructions or dentist's usual procedures
 - economy of time and movement
- Appropriate preparation of the dental record components and X-rays
- Proper use of standard polite greetings at the arrival and departure of the client
- Relevance of questions asked in order to update the patient's medical record

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

D. Assist the dentist during the course of endodontic and periodontic treatments.

SPECIFIC PERFORMANCE CRITERIA

- Proper seating of the patient
- Application of appropriate measures of asepsis and safety
- Adoption and maintenance of an appropriate working position according to the task to be performed
- Anticipation of the dentist's needs
- Proper lighting of the operating area
- Correct performance of tasks related to the taking and developing of X-rays
- Proper application of the following techniques:
 - preparation and exchange of the anaesthetic kit
 - preparation of the dental dam
 - suction and use of air and water syringes
 - exchange of instruments
 - assembly of the scalpel blade
 - handling of dental and surgical cements
 - positioning of the needle on the haemostat clamp
- Constant attention to the well-being of the patient
- Appropriate updating of patient's record, according to treatment administered and the policies of the office
- Communication of appropriate advice, according to type of treatment administered

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

E. Carry out maintenance of materials, equipment, and the treatment room.

F. Participate in the regular tasks of the dental assistant.

**SPECIFIC PERFORMANCE
CRITERIA**

- Appropriate precautions taken pertaining to disinfection and sterilization
- Proper determination of instruments and accessories to be sterilized
- Correct preparation of instruments and accessories to be sterilized
- Proper application of disinfection procedures, according to type of material
- Proper application of sterilization procedures, according to type of equipment being used
- Observance of procedures and regulations concerning the management of biomedical waste
- Economy of time and movement in performance of maintenance tasks
- Order and cleanliness of the work area

- Appropriate degree of participation, according to:
 - treatments being given
 - expressed or unexpressed needs
 - quiet periods

SECOND-LEVEL OPERATIONAL OBJECTIVES

IN ORDER TO ACHIEVE THE FIRST-LEVEL OBJECTIVE, THE STUDENTS SHOULD HAVE PREVIOUSLY ATTAINED SECOND-LEVEL OBJECTIVES, SUCH AS:

Before undertaking any of the activities:

1. Summarize the objectives of the practicum and its requirements.
2. Describe the physical organization and particular features of the practicum location.
3. State the particular policies of the practicum location and compare them with the training requirements.
4. Associate each member of the dental team in the office or clinic with his or her particular role.
5. State any special features of the procedures current in the office or clinic concerning instruments, materials and treatment procedures in endodontics and periodontics.
6. Review the dangers involved in any negligence regarding asepsis measures in a dental office.

MODULE 22: OVERALL TASK PERFORMANCE IN A DENTAL OFFICE

Code: 754 626

Duration: 90 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

EXPECTED OUTCOME

By participating in the required activities of the learning context according to the indicated criteria, the students will be able to
perform all dental assistance tasks required in a dental office.

SPECIFICATIONS

During this module, the students will:

- Become familiar with the physical and interpersonal organization of a dental office and the particular features of the job.
- Apply various techniques related to chair-side assistance, prevention, control of contamination and equipment maintenance.
- Cooperate in the efficient operation of the office.
- Evaluate their ability to work as part of a dental team.

LEARNING CONTEXT

PHASE 1: Familiarization with the Features of the Practicum Environment

- Participating in a welcoming meeting for the purpose of getting to know the physical and interpersonal organization of the dental office and the roles and responsibilities of each member of the dental team.
- Participating in a meeting with the host team of dentist and dental assistant, in the presence of the teacher, to inform them of the students' training requirements and aspects of the students' work to be evaluated during the practicum. Using data for this purpose from the objectives, as well as from the observation checklist.
- Keeping a journal to record the policies of the office, comparisons of particular observations with previous experiences, feelings and degree of comfort with the dental team and the environment.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PHASE 2: Participating in the Tasks of the Dental Assistant

- Planning a schedule with the dentist and the dental assistant, using the office appointment book, to enable the students to perform a variety of chair-side assistance and prevention tasks usually performed by the dental assistant. Presenting this plan to the teacher.
- Carrying out chair-side assistance and prevention tasks, in cooperation with the dental assistant, according to a pre-arranged schedule, sharing related tasks.
- Keeping a log book to record the following points: equipment and its uses; preparation of materials; dental materials used; tasks performed (chair-side assistance, prevention, disinfection, sterilization, equipment maintenance, other); type of clientele; communication; ability to adapt to various clientele and the work environment; positive and negative comments received; relation between training received at school and work experience. Handing in the log book to the teacher.
- Filling in the observation checklist according to instructions received and making sure that the dentist and the dental assistant have filled in theirs.
- Participating in a meeting with the dentist, the dental assistant and the teacher, in order to review their progress. Comparing respective observation checklists, discussing them and, where necessary, establishing a mode of remedial training.

PHASE 3: Integration into the Dental Team

- Planning their work daily, making sure to be familiar with the routine of each treatment.
- Carrying out, in an independent way, all the tasks that belong to the duties of the dental assistant. Checking regularly with the dentist to determine his or her level of satisfaction with tasks carried out and relations with the clients and the dental team. Consulting the dental assistant also, to obtain the assistant's assessment of their work in related tasks.
- Keeping a log book to record the following aspects: tasks performed; progress noted in the performance of these tasks (timing, quality, anticipation, independence) as well as ability to communicate and adjust to various types of client and working environment; observance of office policies and the rules of professional ethics; acceptance of comments received; contribution to the smooth running of the office; change of point of view between the beginning and end of the practicum. Handing in the log book to the teacher.
- Filling in the observation checklist according to instructions received and making sure that those responsible for supervision in the office have filled in theirs.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PHASE 4: Evaluation of the Practicum Experience

- Participating in a meeting with the dentist, the dental assistant and the teacher to compare respective observation checklists.
- Writing up a summary of their practicum experience, using the log book, the observation checklist and the remarks of the dental team and the teacher. Handing in this summary to the teacher.
- Meeting individually with the teacher in order to discuss their practicum experience and their work preferences.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Make sure that the practicum locations selected meet the requirements of the objectives.
- Make sure that the dentists have a sound knowledge of the content of the objectives and their requirements, with regard to the tasks the students will be performing and the type of observation required.
- Make sure that the dental assistants in the offices willingly agree to be paired with the practicum students and to follow the requirements of the objectives.
- Draw up an observation checklist, before the beginning of the practicum, including all the points to be evaluated during the practicum. Give a copy of this checklist to the students and to the persons responsible for observation in the office (dentists and dental assistants).
- Make sure that the students clearly understand the content of the observation checklist and are able to explain it properly to those responsible for observation in the dental office.
- Be present at the students' presentation of the observation checklist to those responsible for observation in the dental office.
- Make sure that the students make regular entries in their journals and fill out the observation checklist at the appropriate times.
- Follow up on the students with frequent visits, in order to avoid the accumulation of problems and to promptly plan for remedial learning activities, if necessary.
- Make sure that the persons responsible for observation in the office are available at the times designated for follow-up and evaluation meetings.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

PARTICIPATION CRITERIA

PHASE 1:

- Participate in meetings and display interest.
- Show particular attention to matters of politeness and etiquette when meeting others.
- Make an effort to clearly present the observation checklist and make sure that those responsible for observation in the office understand what is expected of them.
- Keep a log book on the points set out in the objectives.

PHASE 2:

- Pay careful attention to the content of objectives, while displaying flexibility in planning.
- Show good judgement and initiative in organizing their work.
- Display an interest in the tasks to be carried out and take care to work out an equitable sharing of related tasks with the dental assistant.
- Make an effort to properly apply the various techniques.
- Take constant care to apply the rules of hygiene, asepsis and safety in carrying out tasks.
- Make an effort to communicate well with the clients and with members of the dental team and to observe the rules of professional ethics.
- Agree to keep a log book and an observation checklist, according to the content of the objectives and the instructions received.
- Participate actively in the meeting.

PHASE 3:

- Show good judgement, initiative and a concern for efficiency in planning and organizing their work.
- Try to carry out all tasks according to the techniques learned and the particular features of each treatment.
- Pay attention to needs expressed by the dentist, verbally or not, during the course of various treatments; try to respond adequately and inquire at intervals whether the dentist is satisfied.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

- Pay constant attention to the well-being of clients, the image of the office and observance of the rules of professional ethics.
- Take care to communicate well with the clients and with the members of the dental team.
- Show a constant concern for the application of measures of hygiene, asepsis and safety.
- Keep a log book using the content of the objectives and fill out the observation checklist.

PHASE 4:

- Participate actively in the meeting.
- Write up the required summary.
- Agree to discuss with the teacher the conclusions of their practicum experience.

