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TRANSPORTATION

HEAVY-TRUCK DRIVING

PROGRAM OF STUDY

5643

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5643**

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TRANSPORTATION

HEAVY-TRUCK DRIVING

PROGRAM OF STUDY 5643

The *Heavy-Truck Driving* program leads to the
Diploma of Vocational Studies (DVS)
and prepares the student to work as a

HEAVY-TRUCK DRIVER

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In conformity with the provisions of paragraph (a) of section 23 of the *Act respecting the Conseil supérieur de l'éducation* (R.S.Q., c. C-60), as replaced by section 569 of the *Education Act* (1988, chapter 84), the confessional committees of the Conseil supérieur de l'éducation have given their opinion on this program of study.

This program is authorized for use in the schools as of September 1, 1994.

François Legault
Minister of Education

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INTRODUCTION

The *Heavy-Truck Driving* program is based on the orientations for secondary school vocational education, which call 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. 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 Diploma of Vocational Studies (DVS) 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.

The duration of the program is 615 hours, which includes 420 hours spent on the specific competencies required to practise the occupation and 195 hours on general competencies. The program of study is divided into 13 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.

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 socio-affective 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: 13
 Duration in hours: 615
 Credits: 41

Heavy-Truck Driving
 Code: 5643

CODE	TITLE OF THE MODULE	HOURS	CREDITS*
840 511	1. The Trade and the Training Process	15	1
840 523	2. Laws and Regulations	45	3
840 534	3. Truck Systems	60	4
840 541	4. Occupational Health and Safety	15	1
840 551	5. Navigational Aids	15	1
840 566	6. Basic Driving Techniques	90	6
840 571	7. Mathematics and Physics	15	1
840 582	8. Roadside Repairs	30	2
840 593	9. Loading and Unloading	45	3
840 604	10. Driving a Straight Truck	60	4
840 618	11. Driving a Tractor-Semitrailer	120	8
840 621	12. Starting a Business	15	1
840 636	13. Practicum in the Workplace	90	6

* 15 hours = 1 credit

This program leads to a Diploma of Vocational Studies (DVS) in Heavy-Truck Driving.

2. PROGRAM TRAINING GOALS

The training goals of the *Heavy-Truck Driving* 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 an occupation.

- To teach students to perform heavy-truck driving tasks and activities correctly, at an acceptable level of competence for entry into the job market.
- To foster a concern for respecting the *Highway Safety Code* and trucking regulations.
- To foster a concern for conserving energy.
- To help students acquire efficient and safe work methods.
- To help students develop an ability to react appropriately in emergency situations.

To ensure integration into the job market.

- To help students learn about the job market in trucking.
- To help students integrate into the job market in trucking.

To foster personal development and the acquisition of trade-related knowledge.

- To foster independence and a sense of responsibility.

To ensure job mobility.

- To promote the search for excellence and foster a sense of pride in a job well done.
- To help students develop an ability to adapt to new situations.

3. COMPETENCIES

The competencies to be developed in the *Heavy-Truck Driving* 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 (□) 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 (▲) 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 COMPETENCES (related to technology, subjects, personal development, etc.)								TOTALS	
				Plan the work	Inspect and start up the truck	Drive the truck	Park and inspect the truck	Fill out the forms	Determine their suitability for the trade and the training process	Take responsibility for applying the laws and regulations respecting trucking	Apply knowledge related to the operation of the different systems of a truck	Take responsibility for applying occupational health and safety rules	Use the navigational aids in the cab	Apply knowledge of mathematics and physics	Do roadside repairs	NUMBER OF OBJECTIVES	DURATION (IN HOURS)	
SPECIFIC COMPETENCIES (directly related to the practice of the specific trade)																		
MODULES	MODULES								1	2	3	4	5	7	8	7		
	FIRST-LEVEL OPERATIONAL OBJECTIVES								S	S	B	S	B	B	B			
	DURATION (IN HOURS)								15	45	60	15	15	15	30		195	
6.	Drive a truck on a closed driving circuit	B	90		▲	▲	▲	▲	●	●	●	●	●	○	○			
9.	Load and unload a truck	B	45	▲	△	▲	△	▲	●	●	●	●	○	●	○			
10.	Drive a straight truck	B	60	▲	▲	▲	▲	▲	●	●	●	●	●	●	●			
11.	Drive a tractor-semitrailer	B	120	▲	▲	▲	▲	▲	●	●	●	●	●	●	●			
12.	Determine their suitability for starting a business	S	15	▲				▲	●	○	○	○	○	●				
13.	Enter the work force	S	90	▲	▲	▲	▲	▲	●	●	●	●	●	●	●			
NUMBER OF OBJECTIVES		6														6		
DURATION (IN HOURS)			420														615	

S: Situation 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 *Heavy-Truck Driving* program are presented below, along with the major statement of each corresponding first-level operational objective.

To develop in the students the competencies required to assume responsibility and demonstrate autonomy as a heavy-truck driver.

- Take responsibility for applying the laws and regulations respecting trucking.
- Take responsibility for applying occupational health and safety rules.

To develop in the students the competencies required to drive a truck.

- Apply knowledge related to the operation of the different systems of a truck.
- Use the navigational aids in the cab.
- Apply knowledge of mathematics and physics.
- Do roadside repairs.

To develop in the students the competencies required to drive a truck in a safe and energy-efficient manner.

- Drive a truck on a closed driving circuit.
- Load and unload a truck.
- Drive a straight truck.
- Drive a tractor-semitrailer.

To develop in the students the competencies required to integrate into the work environment.

- Determine their suitability for the trade and the training process.
- Determine their suitability for starting a business.
- Enter the work force.

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:

- at the first level, learning involving prerequisite knowledge
- at the second level, 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 five components and in particular the last phase of a situational objective, see 5.2) 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 five 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 two 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.

B. How to Read a Situational Objective

Situational objectives consist of five 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.

PART II

MODULE 1: THE TRADE AND THE TRAINING PROCESS

CODE: 840 511

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 **determine their suitability for the trade and the training process.**

SPECIFICATIONS

During this module, the students will:

- Become familiar with the nature of the trade.
- Understand the training program.
- Confirm their career choice.
- Begin their integration into the learning environment.

LEARNING CONTEXT

PHASE 1: Information on the Trade

- Learning about the job market in heavy-truck driving, i.e. potential work environments (types of companies, merchandise), job prospects, wages, advancement and transfer opportunities, hiring criteria.
- Learning about the nature and requirements of the job (i.e. tasks, working conditions, health and safety hazards, evaluation criteria, workers' rights and responsibilities).

**FIRST-LEVEL OPERATIONAL OBJECTIVE
SITUATIONAL OBJECTIVE**

LEARNING CONTEXT

PHASE 2: Information on the Program

- Becoming familiar with the training program: the program of study, the training process, evaluation methods, certification of studies.

PHASE 3: Participation in the Training Process

- Reflecting on their preferences and aptitudes with respect to the trade.
- Participating in the suggested activities: meetings with trade specialists, field trips, demonstrations, exhibitions, etc.
- Discussing their perception of the trade:
 - the positive and negative aspects of the trade
 - the demands of the trade
 - the knowledge, skills and attitudes required to practise the trade
- Discussing their initial reactions to the program of study and the training process.

PHASE 4: Evaluation and Confirmation of Career Choice

- Producing a report in which they:
 - express their views on the tasks and working conditions involved in trucking
 - assess their career choice by comparing the demands of the trade with their own preferences and aptitudes

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

INSTRUCTIONAL GUIDELINES

The teacher should:

- Encourage the students to engage in discussions and to express themselves.
- Motivate the students to take part in the suggested activities.
- Help the students to acquire an accurate perception of the trade.
- Help the students assess their career choice honestly and objectively.
- Make suitable reference material available to the students.
- Arrange for the students to meet with trade specialists.
- Provide the students with an outline for the report.

PARTICIPATION CRITERIA

PHASE 1:

- Gather relevant information on employment prospects in heavy-truck driving.
- Gather relevant information on the tasks and working conditions involved in heavy-truck driving.

PHASE 2:

- Gather relevant information on the program of study and the training process.

PHASE 3:

- Demonstrate a willingness to reflect on their preferences and aptitudes.
- Take part in the suggested activities.
- Express their perception of the trade.
- Express their perception of the program of study.

PHASE 4:

- Produce a report.

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 the activities of Phase 1:

1. Find sources of information.
2. Use a research method.
3. Compare information obtained from different sources.
4. Demonstrate a desire to find information.

Before undertaking the activities of Phase 2:

5. Recognize the attitudes required for successful learning.
6. Recognize the importance of organizing their work.
7. Identify the methods that will help them pass their examinations.

Before undertaking the activities of Phase 3:

8. Be familiar with the general communication process.
9. Be familiar with the main obstacles to effective communication.
10. Demonstrate a willingness to respect other people's opinions.

Before undertaking the activities of Phase 4:

11. Demonstrate a willingness to assess their career choice.
12. Be receptive to comments .

MODULE 2: LAWS AND REGULATIONS

CODE: 840 523

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 take responsibility for applying the laws and regulations respecting trucking.

SPECIFICATIONS

At the end of this module, the students will:

- Be familiar with the main provisions of the Highway Safety Code and the attendant regulations.
- Be familiar with the laws and regulations respecting trucking.
- Assess their behaviour and attitudes with respect to following road signs and traffic rules.
- Recognize the importance of complying with the laws and regulations respecting trucking in Canada and the United States.
- Be familiar with the magnitude of the risks involved in transporting dangerous goods, i.e. risks to one's own health and safety, that of others and the environment.

**FIRST-LEVEL OPERATIONAL OBJECTIVE
SITUATIONAL OBJECTIVE**

LEARNING CONTEXT

PHASE 1: Information on the Laws and Regulations Respecting Transportation

- Learning about the provisions of the *Highway Safety Code* and its attendant regulations.
- Learning about the provisions of the *Transport Act* and the *Act respecting truck transportation*, and their attendant regulations.
- Learning about the main provisions of the *Automobile Insurance Act*.
- Learning about the laws and regulations respecting the transportation of dangerous goods.
- Learning about the *Workplace Hazardous Materials Information System (WHMIS)*.
- Learning about all the other legal provisions respecting trucking.

PHASE 2: Reflection on the Importance of Complying With the Laws and Regulations

- Participating in various activities (e.g. identifying road signs, identifying situations in which a driver is breaking traffic rules, studying trucking documents, recognizing signs identifying dangerous goods).
- Participating in simulations of actual problems.
- Observing their surroundings, i.e. noting infractions to the *Highway Safety Code* committed by various drivers, as well as by themselves.
- Discussing the responsibilities of heavy-truck drivers with respect to compliance with Québec, Canadian and American laws and regulations.

PHASE 3: Assessment

- Assessing their behaviour and attitudes with respect to the laws and regulations.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

INSTRUCTIONAL GUIDELINES

The teacher should:

- Encourage the students to engage in discussions and to express themselves.
- Motivate the students to take part in the suggested activities.
- Make suitable reference material and exercises available to the students.
- Give the students concrete examples.
- Make an effort to help the students understand technical concepts.

PARTICIPATION CRITERIA

PHASE 1:

- Gather relevant information on the laws and regulations.

PHASE 2:

- Participate in the suggested activities.
- Participate in the simulations.
- Submit their observations of infractions to the *Highway Safety Code*.
- Give their opinion on the responsibilities of heavy-truck drivers with respect to the laws and regulations.

PHASE 3:

- Demonstrate a willingness to assess their behaviour and attitudes.

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 the activities of Phase 1:

1. Find sources of information.
2. Use a research method.
3. Compare information obtained from different sources.
4. Demonstrate a desire to find information.
- E. Adopt a positive attitude toward complying with laws and regulations.
- E. Define the terms used in the classification of dangerous goods.
- E. Differentiate among the various documents related to the transportation of goods.
- E. Recognize the importance of defensive driving.

MODULE 3: TRUCK SYSTEMS

CODE: 840 534

Duration: 60 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **apply knowledge related to the operation of the different systems of a truck** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Following instructions
- Given:
 - illustrations of an engine, brake system, transmission system, etc.
 - questions related to learning contexts reflecting actual working conditions
- Without referring to course notes

GENERAL PERFORMANCE CRITERIA

- Clear explanation of the operating principles of the main systems
- Accurate explanation of energy-efficient driving techniques

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

A. Summarize the techniques for optimizing the performance of a diesel engine and increasing its life span.

B. Summarize the techniques for optimizing the performance of the transmission system and increasing its life span.

C. Summarize the techniques for optimizing the performance of the air brake system and increasing its life span.

**SPECIFIC PERFORMANCE
CRITERIA**

- Clear explanation of the operation of a diesel engine
- Accurate summary of techniques for:
 - maintaining the engine in good working order
 - ensuring optimal operation
 - saving energy

- Clear explanation of the operation of the clutch, transmission, drive shafts and differentials
- Accurate summary of techniques for:
 - maintaining the system in good working order
 - ensuring optimal operation
 - saving energy

- Clear explanation of the operation of the air brake system
- Accurate summary of techniques for:
 - maintaining the system in good working order
 - ensuring optimal operation
 - saving energy

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

D. Summarize the techniques for optimizing the performance of the fuel and exhaust systems and increasing their life span.

E. Summarize the techniques for optimizing the performance of the suspension and steering system and increasing their life span.

F. Summarize the techniques for optimizing the performance of the electrical system and increasing its life span.

**SPECIFIC PERFORMANCE
CRITERIA**

- Clear explanation of the operation of the fuel and exhaust systems
- Accurate summary of techniques for:
 - maintaining the systems in good working order
 - ensuring optimal operation
 - saving energy

- Clear explanation of the operation of the suspension and steering system
- Accurate summary of techniques for:
 - maintaining the systems in good working order
 - ensuring optimal operation
 - saving energy

- Clear explanation of the operation of the electrical system
- Accurate summary of techniques for:
 - maintaining the system in good working order
 - ensuring optimal operation
 - saving energy

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 summarize the techniques for optimizing the performance of a diesel engine and increasing its life span (A):

1. Differentiate among the various types of trucks.
2. Recognize the major makes of truck.
3. Recognize the importance of understanding how a vehicle works in order to save energy.

MODULE 4: OCCUPATIONAL HEALTH AND SAFETY

CODE: 840 541

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 **take responsibility for applying occupational health and safety rules.**

SPECIFICATIONS

At the end of this module, the students will:

- Be aware of the risks inherent in the trade.
- Demonstrate a positive attitude with respect to the measures to be taken to avoid industrial accidents and occupational diseases.
- Question their own attitudes with respect to occupational health and safety.

LEARNING CONTEXT

PHASE 1: **Information on Occupational Health and Safety**

- Learning about occupational health and safety.
- Learning about the main provisions of the *Act respecting occupational health and safety*, more specifically, the purpose of the act, as well as employers' and workers' rights and responsibilities.
- Learning about trucking-related health and safety rules.
- Learning about the risks inherent in the trade and about the measures to take and attitudes to adopt in order to avoid industrial accidents and occupational diseases.

**FIRST-LEVEL OPERATIONAL OBJECTIVE
SITUATIONAL OBJECTIVE**

LEARNING CONTEXT

PHASE 2: Reflection on the Importance of Observing Occupational Health and Safety Rules

- Reflecting on their attitudes and behaviour with respect to occupational health and safety.
- Participating in a discussion on trucking-related hazards and diseases.
- Participating in activities (case studies) during which each student suggests ways of preventing industrial accidents and occupational diseases at school and in the workplace.

PHASE 3: Assessment of Their Behaviour and Attitudes With Respect to Occupational Health and Safety

- Producing a report in which they:
 - express their views on occupational health and safety
 - describe their behaviour and attitudes with respect to the application of occupational health and safety rules

INSTRUCTIONAL GUIDELINES

The teacher should:

- Encourage the students to engage in discussions and to express themselves.
- Motivate the students to take part in the suggested activities.
- Raise the students' awareness of the health and safety hazards inherent in the trade.
- Make suitable reference material available to the students.
- Give the students concrete examples.

**FIRST-LEVEL OPERATIONAL OBJECTIVE
SITUATIONAL OBJECTIVE**

PARTICIPATION CRITERIA

PHASE 1:

- Gather relevant information on health and safety.
- Gather relevant information on the *Act respecting occupational health and safety*.
- Gather relevant information on occupational health and safety rules.
- Gather relevant information on the occupational hazards inherent in the trade and on the measures to take and attitudes to adopt to avoid industrial accidents and occupational diseases.

PHASE 2:

- Reflect on occupational health and safety.
- Express their views on the risks of industrial accidents and occupational diseases.
- Suggest ways of preventing industrial accidents and occupational diseases in the workplace and at school.

PHASE 3:

- Produce a report.

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 the activities of Phase 1:

1. Find sources of information.
2. Use a research method.
3. Demonstrate a desire to find information.

Before undertaking the activities of Phase 2:

4. Apply the basic principles of effective communication.
5. Recognize the importance of occupational health and safety rules.
6. Be receptive to comments.
7. Demonstrate a willingness to respect other people's opinions.

Before undertaking the activities of Phase 3:

8. Demonstrate a willingness to take a critical look at their own behaviour and attitudes.

MODULE 5: NAVIGATIONAL AIDS

CODE: 840 551

Duration: 15 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use the navigational aids in the cab** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Following instructions
- Given:
 - a vehicle equipped with a road map, communications equipment and an on-board computer
 - an activity report and graph

GENERAL PERFORMANCE CRITERIA

- Observance of occupational health and safety rules when using equipment
- Observance of the rules of communication
- Proper use of communications equipment

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

A. Read a road map.

B. Use communications devices:

- select a channel
- transmit messages
- receive messages

C. Use an on-board computer:

- enter data
- retrieve data
- interpret data

**SPECIFIC PERFORMANCE
CRITERIA**

- Accurate reading of map:
 - accurate interpretation of main symbols used in maps
 - accurate calculation of distances using the legend
 - accurate location of cardinal points
- Proper choice of route

- Accurate interpretation of codes
- Accurate choice of channel
- Observance of techniques for using the devices
- Quality of communication:
 - clear message
 - accurate terminology
 - no foul language
 - relevance of subject discussed over commercial bands
 - politeness

- Proper use of computer:
 - observance of procedure for entering basic data and making log entries
 - accurate reading of manufacturers' instructions
- Compliance with manufacturers' instructions
- Observance of company rules
- Accurate interpretation of reports and graphs

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 use communications devices:

•select a channel

•transmit messages

•receive messages (B):

1. Recognize the effectiveness of means of communication.
2. Differentiate among the main elements of the communication process.
3. Explain instructions in their own words.
4. Show concern for maintaining the devices in good condition.
5. Recognize the importance of listening attentively.
6. Show concern for adopting safe attitudes when using the equipment.

MODULE 6: BASIC DRIVING TECHNIQUES

CODE: 840 566

Duration: 90 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **drive a truck on a closed driving circuit** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Under supervision
- Following instructions likely to be given in the workplace
- Driving a loaded diesel straight truck or tractor-semitrailer in good condition
- On a closed driving circuit
- Regardless of the weather conditions
- During the day or at night

GENERAL PERFORMANCE CRITERIA

- Control of vehicle
- Observance of the *Highway Safety Code*
- Observance of occupational health and safety rules
- Accurate interpretation of manufacturers' instructions
- Detection of braking problems and application of appropriate solutions
- Use of defensive driving techniques
- Use of energy-conserving techniques

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

- | | |
|--|--|
| <p>A. Interpret the instructions.</p> | <ul style="list-style-type: none"> - Accurate interpretation of instructions |
| <p>B. Inspect and start up:</p> <ul style="list-style-type: none"> · a straight truck · a tractor-semitrailer | <ul style="list-style-type: none"> - Accurate location of accessories and instruments - Complete inspection of vehicle: <ul style="list-style-type: none"> • observance of safety check procedure • careful inspection of vehicle components - Observance of start-up techniques - Safe hitching of semitrailer to tractor |
| <p>C. Drive on a closed driving circuit:</p> <ul style="list-style-type: none"> · in a straight truck · in a tractor-semitrailer | <ul style="list-style-type: none"> - Accurate identification of type of transmission - Proper shifting technique <ul style="list-style-type: none"> • accurate perception of friction point • proper clutching • proper handling of gear shifter - Observance of techniques for turning left and right - Observance of techniques for stopping |
| <p>D. Park:</p> <ul style="list-style-type: none"> • a straight truck • a tractor-semitrailer | <ul style="list-style-type: none"> - Observance of parking techniques |

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

- E. Back up:
- a straight truck
 - a tractor-semitrailer

- F. Park and inspect:
- a straight truck
 - a tractor-semitrailer

- G. Fill out the forms.

**SPECIFIC PERFORMANCE
CRITERIA**

- Observance of techniques for backing up:
 - proper handling of steering wheel
 - proper interpretation of signals
 - proper choice of gear
 - proper verification of rear view
 - proper use of hazard lights

- Compliance with safety standards
- Complete inspection of vehicle
- Proper unhitching of semitrailer
- Appropriate technique for parking the vehicle

- Accurate information
- Clarity and precision

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 inspect and start up:

• **a straight truck**

• **a tractor-semitrailer (B):**

1. Differentiate among the characteristics of different truck engines.
2. Identify various mechanical problems by sight, sound, smell and touch.
3. Recognize the importance of respecting professional ethics.
4. Show concern for observing occupational health and safety rules when inspecting the vehicle.
5. Use the main communications devices.
6. Show concern for doing a complete and careful inspection of the vehicle.
7. Describe the techniques for starting up a diesel engine in cold and warm weather.

Before learning how to drive on a closed driving circuit:

• **in a straight truck**

• **in a tractor-semitrailer (C):**

8. Recognize the different types of transmissions.
9. Explain the nature of the friction point.
10. Interpret road signs.
11. Adopt defensive driving techniques.
12. Show concern for conserving energy.

MODULE 7: MATHEMATICS AND PHYSICS

CODE: 840 571

Duration: 15 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

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

CONDITIONS FOR PERFORMANCE EVALUATION

- Following instructions
- Given questions related to learning contexts reflecting actual working conditions
- Using:
 - a calculator
 - a loads and dimensions chart

GENERAL PERFORMANCE CRITERIA

- Proper application of knowledge in different situations
- Accurate conversion of imperial system units into metric system units

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 calculate:

• **daily fuel consumption**

• **axle load distribution**

• **the time required to drive from one point to another (A):**

1. Perform the four arithmetic operations.
2. Use the rule of three.
3. Name the main units of weight and measurement.
4. Recognize the importance of solving mathematical and physics problems in truck driving.
5. Do precise calculations.
6. Interpret activity reports.
7. Interpret regulations respecting loads and dimensions.
8. Read road maps.
9. Apply the following formula: $\text{distance} = \text{speed} \times \text{time}$.

MODULE 8: ROADSIDE REPAIRS

CODE: 840 582

Duration: 30 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **do roadside repairs** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Following instructions
- Given:
 - a truck
 - a spare wheel
- Using the necessary tools

GENERAL PERFORMANCE CRITERIA

- Observance of occupational health and safety rules
- Proper use of tools
- Proper functioning of repaired components

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

- | | |
|--|--|
| <p>A. Check the level of the following fluids and top them off if necessary:</p> <ul style="list-style-type: none"> • windshield washer fluid • antifreeze • transmission oil • differential oil • power steering fluid • engine oil • axle oil | <ul style="list-style-type: none"> - Observance of inspection technique - Accurate measurements taken - Proper choice of products - Observance of technique for topping off each fluid |
| <p>B. Check the tires.</p> | <ul style="list-style-type: none"> - Accurate evaluation of condition of tires - Accurate adjustment of air pressure |
| <p>C. Check the batteries.</p> | <ul style="list-style-type: none"> - Observance of inspection technique |
| <p>D. Replace or adjust the following accessories:</p> <ul style="list-style-type: none"> • headlights • lights • mirrors • windshield wipers • belts • filters | <ul style="list-style-type: none"> - Components well fastened - Proper tension where applicable |
| <p>E. Replace a wheel.</p> | <ul style="list-style-type: none"> - Observance of technique - No rim runout |
| <p>F. Adjust the components of the air brake system.</p> | <ul style="list-style-type: none"> - Compliance with manufacturers' instructions - Accurate adjustments |

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 check the level of the following fluids and top them off if necessary:

- windshield washer fluid
- antifreeze
- transmission oil
- differential oil
- power steering fluid
- engine oil
- axle oil (A):

1. Show concern for observing health and safety rules.
2. Explain the role of lubricants.
3. List the lubrication points in a truck.
4. Detect fluid leaks.

Before learning how to check the tires (B):

5. Differentiate among the different types of tires.
6. Explain the causes of tire wear.
7. Note the vibrations caused by tire problems when driving a truck.

Before learning how to check the batteries (C):

8. Explain the role of the battery.

Before learning how to replace a wheel (E):

9. Differentiate among the various types of wheels and rims.

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 adjust the components of the air brake system (F):

10. Differentiate among the various types of brakes.
11. List the components of an air brake system.
12. Explain the operation of an air brake system.

MODULE 9: LOADING AND UNLOADING

CODE: 840 593

Duration: 45 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **load and unload a truck** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Following instructions
- Given:
 - a stake-body semitrailer with tie-downs and a tarpaulin
 - a loaded dump truck

GENERAL PERFORMANCE CRITERIA

- Observance of occupational health and safety rules
- Observance of the *Highway Safety Code*
- Observance of the *Vehicle load and size limits regulation*
- Observance of the *Vehicle load and size limits guide*
- Proper use of loading and unloading techniques

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

A. Interpret the instructions.

- Accurate interpretation of instructions respecting:
 - the vehicle
 - the merchandise

B. Load and unload a straight truck and a conventional semitrailer:

- Back the vehicle up to the loading dock.
 - Proper verification of rear view
 - Observance of techniques for backing up and stopping
- Handle the merchandise and load it into the straight truck or conventional semitrailer.
 - Accurate interpretation of symbols on the merchandise
 - Proper and safe handling of merchandise
 - Proper distribution of load
- Secure the merchandise.
 - Observance of the *Regulation respecting standards for the securing of loads*
 - Observance of techniques for securing merchandise
- Unload the merchandise.
 - Observance of techniques appropriate to the type of merchandise

C. Load and unload a stake-body semitrailer:

- Install the stakes.
 - Safe installation in conformity with manufacturers' instructions
- Position the vehicle for loading.
 - Proper verification of rear view
 - Observance of techniques for backing up and parking

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

- Handle the merchandise and load it onto the platform.
 - Secure the merchandise.
 - Install the tarpaulin.
 - Unload the merchandise.
 - Put away the stakes and the tarpaulin.
- D. Load and unload a dump truck and a dump semitrailer:
- Position the vehicle for loading.
 - Report to a weigh station.

**SPECIFIC PERFORMANCE
CRITERIA**

- Accurate interpretation of symbols on the merchandise
- Proper and safe handling of merchandise
- Proper distribution of load on platform
- Observance of the *Regulation respecting standards for the securing of loads*
- Observance of techniques for securing merchandise
- Safe installation in conformity with manufacturers' instructions
- Observance of techniques appropriate to the type of merchandise
- Proper storage
- Accurate interpretation of signals
- Proper verification of rear view
- Observance of techniques for backing up and stopping
- Observance of weighing techniques
- Observance of the *Regulation respecting bulk trucking*

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

- Unload the bulk merchandise.
- E. Fill out the forms.

**SPECIFIC PERFORMANCE
CRITERIA**

- Proper inspection of area
 - Observance of unloading technique
-
- Accurate information
 - Clarity and precision

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 load and unload a straight truck and a conventional semitrailer:

- back the vehicle up to the loading dock
- handle the merchandise and load it into the straight truck or conventional semitrailer
- secure the merchandise
- unload the merchandise (B):

1. Interpret the laws and regulations respecting trucking.
2. Differentiate among the various types of trucks.
3. Show concern for observing health and safety rules.
4. Calculate loads.
5. Adjust the axles.
6. Adjust the fifth wheel.
7. Show concern for distributing the load properly.
8. Explain the techniques for backing up.
9. Show concern for being in good physical condition.

MODULE 10: DRIVING A STRAIGHT TRUCK

CODE: 840 604

Duration: 60 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **drive a straight truck** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Under supervision
- Given an itinerary
- Driving a loaded diesel straight truck with a nonsynchronized manual transmission
- In the country and the city
- Regardless of the weather conditions
- During the day or at night

GENERAL PERFORMANCE CRITERIA

- Control of straight truck in a variety of situations:
 - different kinds of roads
 - different road surfaces
 - various traffic conditions
- Observance of the *Highway Safety Code*
- Observance of occupational health and safety rules
- Observance of time limits
- Detection of braking problems and application of appropriate solutions
- Use of defensive driving techniques
- Use of energy-conserving techniques

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

- | | |
|---|---|
| A. Plan the work. | <ul style="list-style-type: none"> - Accurate interpretation of dispatcher's instructions - Determination of itinerary - Acceptable estimate of time required for delivery |
| B. Inspect and start up a straight truck. | <ul style="list-style-type: none"> - Observance of safety check procedure - Observance of start-up techniques |
| C. Back up to the loading dock. | <ul style="list-style-type: none"> - Observance of techniques for backing up |
| D. Load the truck, if applicable. | <ul style="list-style-type: none"> - Proper use of equipment - Proper use of loading techniques - Compliance with standards respecting loads and size |
| E. Drive a straight truck: <ul style="list-style-type: none"> • in the country and the city • on flat and hilly ground • during the day and at night | <ul style="list-style-type: none"> - Proper handling - Proper shifting - Observance of techniques for turning left and right - Observance of techniques for stopping - Proper use of equipment - Proper reactions in emergency situations |
| F. Report to a weigh station. | <ul style="list-style-type: none"> - Observance of techniques for stopping - Observance of weighing techniques |

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

- G. Unload the truck, if applicable.
- H. Park and inspect a straight truck.
- I. Fill out the forms.

**SPECIFIC PERFORMANCE
CRITERIA**

- Observance of unloading techniques
- Proper monitoring of merchandise

- Compliance with safety standards
- Complete inspection of vehicle

- Accurate information related to:
 - driving and working hours
 - the inspection chart
- Clarity and precision

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 (A):

1. Read a road map.

Before learning how to inspect and start up a straight truck (B):

2. Be familiar with the safety check procedure.
3. Show concern for doing a complete and careful inspection.
4. Identify various mechanical problems by sight, sound, smell and touch.
5. Show concern for observing health and safety rules when inspecting the straight truck.
6. Describe the techniques for starting up a diesel engine in cold and warm weather.

Before learning how to back up to the loading dock (C):

7. Explain the techniques for backing up.

Before learning how to load the truck, if applicable (D):

8. Interpret the *Vehicle load and size limits regulation*
9. Use handling equipment.

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 drive a straight truck:

- in the country and the city
- on flat and hilly ground
- during the day and at night (E):

10. Describe the influence of different factors on driving.
11. Interpret the laws of physics applicable to driving.
12. Find the friction point (on flat and hilly ground).
13. Double clutch.
14. Shift up and down through five gears.
15. Interpret road signs.
16. Show concern for adopting defensive driving techniques.
17. Show concern for respecting the *Highway Safety Code*.

Before learning how to fill out the forms (I):

18. Recognize the importance of accurately noting information related to driving and working hours.

MODULE 11: DRIVING A TRACTOR-SEMITRAILER

CODE: 840 618

Duration: 120 hours

FIRST-LEVEL OPERATIONAL OBJECTIVE BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **drive a tractor-semitrailer** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Under supervision
- Given an itinerary
- Driving a loaded diesel tractor-semitrailer with a nonsynchronized manual transmission
- In the country and the city
- Regardless of the weather conditions
- During the day or at night

GENERAL PERFORMANCE CRITERIA

- Control of tractor-semitrailer in a variety of situations:
 - different kinds of roads
 - different road surfaces
 - various traffic conditions
- Observance of the *Highway Safety Code*
- Observance of occupational health and safety rules
- Observance of time limits
- Detection of braking problems and application of appropriate solutions
- Use of defensive driving techniques
- Use of energy-conserving techniques

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

**SPECIFIC PERFORMANCE
CRITERIA**

- | | |
|--|---|
| A. Plan the work. | <ul style="list-style-type: none"> - Accurate interpretation of dispatcher's instructions - Determination of itinerary - Acceptable estimate of time required for delivery |
| B. Inspect and start up a tractor-semitrailer. | <ul style="list-style-type: none"> - Observance of safety check procedure - Observance of start-up techniques - Safe hitching of semitrailer to tractor |
| C. Back up to the loading dock. | <ul style="list-style-type: none"> - Observance of techniques for backing up |
| D. Load the truck, if applicable. | <ul style="list-style-type: none"> - Proper use of equipment - Proper use of loading techniques - Compliance with standards respecting loads and sizes |
| E. Drive a tractor-semitrailer: <ul style="list-style-type: none"> • in the country and the city • on flat and hilly ground • during the day and at night | <ul style="list-style-type: none"> - Proper handling - Proper shifting - Observance of techniques for turning left and right - Observance of techniques for stopping - Proper use of equipment - Proper reactions in emergency situations |
| F. Report to a weigh station. | <ul style="list-style-type: none"> - Observance of techniques for stopping - Observance of weighing techniques |

**FIRST-LEVEL OPERATIONAL OBJECTIVE
BEHAVIOURAL OBJECTIVE**

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

- G. Unload the truck, if applicable.
- H. Park and inspect a tractor-semitrailer.
- I. Fill out the forms.

**SPECIFIC PERFORMANCE
CRITERIA**

- Observance of unloading techniques
- Proper monitoring of merchandise

- Compliance with safety standards
- Complete inspection of vehicle
- Safe unhitching of semitrailer

- Accurate information related to:
 - driving and working hours
 - the inspection chart
- Clarity and precision

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 (A):

1. Read a road map.

Before learning how to inspect and start up a tractor-semitrailer (B):

2. Be familiar with the safety check procedure.
3. Show concern for doing a complete and careful inspection.
4. Identify various mechanical problems by sight, sound, smell and touch.
5. Show concern for observing health and safety rules when inspecting the tractor-semitrailer.
6. Describe the techniques for starting up a diesel engine in cold and warm weather.

Before learning how to back up to the loading dock (C):

7. Explain the techniques for backing up.
8. Back up a tractor-semitrailer to the left on a closed driving circuit.

Before learning how to load the truck, if applicable (D):

9. Interpret the *Vehicle load and size limits regulation*.
10. Use handling equipment.

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 drive a tractor-semitrailer:

- in the country and the city
- on flat and hilly ground
- during the day and at night (E):

11. Describe the influence of different factors on driving.
12. Interpret the laws of physics applicable to driving.
13. Find the friction point (on flat and hilly ground).
14. Double clutch.
15. Shift up and down through 13 gears.
16. Interpret road signs.
17. Show concern for adopting defensive driving techniques.
18. Show concern for respecting the *Highway Safety Code*.

Before learning how to fill out the forms (I):

19. Recognize the importance of accurately noting information related to driving and working hours.

MODULE 12: STARTING A BUSINESS

CODE: 840 621

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 **determine their suitability for starting a business.**

SPECIFICATIONS

During this module, the students will:

- Assess their entrepreneurial abilities.
- Become familiar with the factors to consider when starting a business.

LEARNING CONTEXT

PHASE 1: Information on Starting a Trucking Business

- Learning about the qualities necessary to become an entrepreneur.
- Learning about the factors to consider when starting a business:
 - advantages and disadvantages of the different types of business organization
 - government requirements
 - financial assistance
 - other types of assistance
 - organizational structure of trucking companies, etc.

**FIRST-LEVEL OPERATIONAL OBJECTIVE
SITUATIONAL OBJECTIVE**

LEARNING CONTEXT

PHASE 2: Familiarization With the Process of Starting a Business

- Reflecting on their preferences and aptitudes with respect to starting a trucking business.
- Comparing their qualities with those necessary to become an entrepreneur.
- Participating in various activities:
 - conference given by an entrepreneur
 - video on starting a business
 - readings, etc.
- Participating in discussions.

PHASE 3: Evaluation

- Producing a report on the positive and negative aspects of their personality with respect to the possibility of becoming an entrepreneur.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Make suitable reference material on starting a business available to the students.
- Encourage the students to engage in discussions and to express themselves.
- Motivate the students to take part in the suggested activities.
- Organize a meeting with entrepreneurs.

**FIRST-LEVEL OPERATIONAL OBJECTIVE
SITUATIONAL OBJECTIVE**

PARTICIPATION CRITERIA

PHASE 1:

- Gather relevant information on the qualities necessary to become an entrepreneur.
- Gather relevant information on starting a business.

PHASE 2:

- Demonstrate a willingness to reflect on their preferences and aptitudes.
- Compare their qualities with those necessary to become an entrepreneur.
- Participate in activities.
- Participate in discussions.

PHASE 3:

- Produce a report.

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 the activities of Phase 1:

1. Be familiar with the characteristics of trucking businesses in their region.
2. Find sources of information on starting a business.
3. Use a research method.

Before undertaking the activities of Phase 2:

4. Communicate effectively.
5. Show concern for participating in the activities.

Before undertaking the activities of Phase 3:

6. Demonstrate a willingness to evaluate their participation in the activities.

MODULE 13: PRACTICUM IN THE WORKPLACE

CODE: 840 636

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 **enter the work force.**

SPECIFICATIONS

During this module, the students will:

- Become familiar with certain aspects of the trucking work environment.
- Perform various activities related to the trade.
- Follow company rules.
- Observe the *Highway Safety Code*.
- Use defensive and energy-efficient driving techniques.
- Communicate with colleagues and supervisors.

LEARNING CONTEXT

PHASE 1: Preparation for the Practicum

- Learning about the objectives and procedures related to the practicum.
- Making a list of trucking companies likely to hire trainees.
- Learning about the company rules.
- Taking the necessary steps to obtain a practicum position.

**FIRST-LEVEL OPERATIONAL OBJECTIVE
SITUATIONAL OBJECTIVE**

LEARNING CONTEXT

PHASE 2: Practicum in the Workplace

- Gathering information on the workplace:
 - observing the work environment and work methods
 - sharing information with colleagues, etc.
- Performing various trucking-related activities.
- Noting their observations in a log.

PHASE 3: Evaluation

- Producing a report in which they present:
 - their observations
 - the activities they performed
 - the similarities and differences between the school and the workplace
- Participating in the evaluation of the practicum with instructors and the person responsible for the practicum in the company.
- Participating in the evaluation of practicums with the other trainees and with instructors.

FIRST-LEVEL OPERATIONAL OBJECTIVE SITUATIONAL OBJECTIVE

INSTRUCTIONAL GUIDELINES

The teacher should:

- Maintain good relations with the appropriate contacts at trucking companies.
- Provide the students with documentation on the companies.
- Help the students negotiate a practicum position in a trucking company.
- Show the importance of following company rules and adopting a positive attitude.
- Provide the students with support and supervision.
- Make sure that the students are under the constant supervision of a responsible person in the company.
- Provide the students with an outline for the report.
- Encourage discussion among students, especially during the practicum search and at the evaluation stage.

PARTICIPATION CRITERIA

PHASE 1:

- Make a list of trucking companies in their region.
- Look for a practicum position.
- Learn about the objectives of and procedure for the practicum.
- Learn about the company rules.

PHASE 2:

- Gather information on the workplace.
- Perform tasks.
- Follow company rules.
- Write down their observations.

PHASE 3:

- Produce a report.
- Participate in evaluations.

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 the activities of Phase 1:

1. Demonstrate an interest in participating in a practicum.
2. Differentiate among the trucking companies in their region.

Before undertaking the activities of Phase 2:

3. Describe the behaviour to adopt in the workplace.
4. Recognize the importance of following company rules.
5. Show concern for observing health and safety rules.
6. Show concern for observing the *Highway Safety Code*.
7. Show concern for adopting a positive attitude.
8. Show concern for adopting an energy-efficient technique when driving a straight truck or tractor-semitrailer.

Before undertaking the activities of Phase 3:

9. Show concern for writing a good practicum report.
10. Be receptive to comments.

Éducation

Québec 

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