

13

COMMUNICATIONS AND DOCUMENTATION

PRINTING

PROGRAM OF STUDY
5746

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COMMUNICATIONS AND DOCUMENTATION

PRINTING

PROGRAM OF STUDY 5746

The *Printing* program leads to the Diploma of Vocational Studies (DVS) and prepares the student to practise the occupation of **offset and screen press operator**

**Direction générale de la formation
professionnelle et technique**

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INTRODUCTION

The *Printing* program was designed on the basis of a 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. Various factors were kept in mind in developing the program: training needs, the job situation, purposes, goals, and strategies and means to attain the 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.

In order to be admitted to the *Printing* program leading to a DVS, students must meet one of the following conditions:

- Be the holder of a Secondary School Diploma
- Be at least 16 years of age and have earned Secondary IV credits in language of instruction, second language and mathematics, or have had prior learning recognized as equivalent in accordance with sections 232 and 250 of the *Education Act*
- Be 18 years of age or over and have the functional prerequisites prescribed in accordance with section 465 of the *Education Act*

The duration of the program is 1 350 hours, which includes 1 080 hours spent on the specific competencies required to practise the occupation and 270 hours on general competencies. The program of study is divided into 19 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, a description of the program training goals, the competencies to be developed, 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.

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 knowledge, skills, perceptions and attitudes that enable a person to correctly perform a work-related 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

A component part of a program of study comprising an operational objective.

Credit

A unit used for expressing quantitatively the value of each module 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: 19
Duration in hours: 1 350
Credits: 90

Printing
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CODE	TITLE OF THE MODULE	HOURS	CREDITS*
982211	1. The Occupation and the Training Process	15	1
982221	2. Health and Safety	15	1
982236	3. Offset Press Set-Up	90	6
982244	4. Quality Control	60	4
982254	5. Finishing Techniques	60	4
982262	6. Basic Mechanical Adjustments	30	2
982268	7. Printing Text	120	8
982284	8. Stripping and Platemaking	60	4
982294	9. Preparing Printing Supplies	60	4
982326	10. Printing Solids	90	6
982318	11. Screen Printing	120	8
982324	12. Numbering and Perforating	60	4
982336	13. Two-Colour Printing	90	6
982362	14. Job-Search Techniques	30	2
982278	15. Tints and Halftones	120	8
982372	16. Teamwork	30	2
982388	17. Four-Colour Printing	120	8
982384	18. Four-Colour Screen Printing	60	4
982398	19. Entering the Labour Market	120	8

- 15 hours = 1 credit

2. PROGRAM TRAINING GOALS

The training goals of the *Printing* 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.

- To prepare students to perform printing tasks and activities correctly, at a level of competence acceptable for entering the job market.
- To prepare students to perform satisfactorily in the occupation of a press operator by fostering:
 - the development of the intellectual skills required to make sound decisions and solve problems in carrying out work;
 - the reinforcement of the habits of attentiveness and precision in carrying out work;
 - the reinforcement of the habits of organization, tidiness and speed in the performance of tasks;
 - concern for communicating effectively with clients, superiors and colleagues and expressing themselves clearly in English.

To ensure that students are prepared to enter the work force.

- To familiarize students with their rights and responsibilities as workers.
- To familiarize students with the job market in general and the conditions in the field of printing in particular.
- To help students familiarize themselves with the occupation by giving them the opportunity to experience a real working environment.

To foster personal and occupational development.

- To foster students' autonomy, sense of responsibility and desire for excellence.
- To help students understand the principles underlying the methods and technology used in printing.
- To help students acquire the habit of checking and correcting their work.
- To help students acquire work methods and a sense of discipline.

To ensure job mobility.

- To help students acquire solid, basic training.
- To help students develop a positive attitude toward technological change and new situations.
- To help students increase their ability to learn, to become informed and to find resources.
- To prepare students for an active job search.

3. COMPETENCIES

The competencies to be developed in the *Printing* program are shown on the grid of learning focuses on the following page. The grid lists the 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 apply in practising 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 shaded symbols 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 student's autonomy. The vertical axis of the grid shows the competencies directly related to the specific trade or occupation. These competencies are generally arranged in a 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

GRID OF LEARNING FOCUSES		FIRST-LEVEL OPERATIONAL OBJECTIVES	DURATION (IN HOURS)	WORK PROCESS (major steps)					GENERAL COMPETENCIES (related to technology, subjects, personal development, etc.)								TOTALS	
				Plan the job	Prepare the equipment	Print proofs	Print the job	Clean up work area	Determine their suitability for the occupation and the training process	Apply health and safety rules in a printing shop	Understand their role in the quality control process	Apply basic mechanical adjustment techniques	Apply stripping and platemaking techniques	Prepare printing supplies	Apply job-search techniques	NUMBER OF OBJECTIVES	DURATION (IN HOURS)	
PRINTING																		
(update of the <i>Printing and Finishing</i> program)																		
SPECIFIC COMPETENCIES (directly related to the practice of the specific occupation)																		
MODULES	MODULES								1	2	4	6	8	9	14			
	FIRST-LEVEL OPERATIONAL OBJECTIVES								S	S	S	B	B	B	S	7		
	DURATION (IN HOURS)								15	15	60	30	60	60	30		270	
3	Set up an offset press	B	90	▲	▲	▲	▲	▲	○	●	○	○						
5	Apply finishing techniques	B	60	▲	▲	△	▲	△	○	●		○	○	○				
7	Print offset jobs involving text	B	120	▲	▲	▲	▲	▲	○	●	●	○	○	○				
10	Print offset jobs involving solids	B	90	▲	▲	▲	▲	▲	○	●	○	○	○	●				
11	Produce prints in screen printing	B	120	▲	▲	▲	▲	▲	○	●	○		○	○				
12	Print jobs requiring numbering, perforating or scoring	B	60	▲	▲	▲	▲	▲	○	●	○	●	●	●				
13	Print offset jobs in two colours simultaneously	B	90	▲	▲	▲	▲	▲	○	●	●	●	●	●				
15	Use tints and halftones in offset printing	B	120	▲	▲	▲	▲	▲	○	●	●	●	●	●				
16	Work as a team to print documents	S	30	▲	▲	▲	▲	▲	○	●	●	●	●	●				
17	Produce offset four-colour prints	B	120	▲	▲	▲	▲	▲	○	●	●	●	●	●				
18	Print four-colour jobs in screen printing	B	60	▲	▲	▲	▲	▲	○	●	●		○	○				
19	Enter the labour market	S	120	△	△	△	△	△	○	○	○	○	○	○	○			
NUMBER OF OBJECTIVES		12														19		
DURATION (IN HOURS)			1080														1350	

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 *Printing* program are presented below, along with the major statement of each corresponding operational objective.

To develop in the students the competencies required to integrate harmoniously into the school and work environments.

- Determine their suitability for the occupation and the training process.
- Apply health and safety rules in a printing shop.
- Understand their role in the quality control process.
- Apply job-search techniques.
- Work as a team to print documents.
- Enter the labour market.

To develop in the students the competencies needed to prepare elements for printing.

- Apply stripping and platemaking techniques.
- Prepare printing supplies.

To develop in the students the competencies needed to set up and maintain the various types of printing presses.

- Set up an offset press.
- Perform basic mechanical adjustments.

To develop in the students the competencies required to print various types of documents.

- Print offset jobs involving text.
- Use tints and halftones in offset printing.
- Produce prints in screen printing.
- Print offset jobs involving solids.
- Print offset jobs in two colours simultaneously.
- Print jobs requiring numbering, perforating or scoring.
- Produce offset four-colour prints.
- Print four-colour jobs in screen printing.

To develop in the students the competencies needed to apply finishing techniques.

- Apply finishing techniques.

5. OPERATIONAL OBJECTIVES

5.1 DEFINITION

An operational objective is defined for each competency to be developed, as presented in the grid of learning focuses in Chapter 3. 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.

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.

Operational objectives cover the learning that the students need to develop a competency:

- **The specifications or 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. its six components, particularly 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.

5.2 HOW TO READ OPERATIONAL OBJECTIVES

5.2.1 How to Read a Behavioural Objective

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

- 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.
- 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.
- 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:

- The **specifications of the expected behaviour** describe the essential elements of the competency in terms of specific behaviours.
- 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.
- 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.

5.2.2 How to Read a Situational Objective

Situational objectives consist of six components:

- The **expected outcome** states a competency as an aim to be pursued throughout the course.
- The **specifications** outline the essential aspects of the competency and ensure a better understanding of the expected outcome.
- 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
- 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.

- The **participation criteria** describe the requirements the students must fulfill, 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.
- 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: 982211

Duration: 15 hours

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.
- Confirm their career choice.

LEARNING CONTEXT

PHASE 1: Information on the Occupation

- Learning about the job market in printing and publishing: work environments, job prospects, salaries, and promotion and transfer opportunities.
- Learning about the nature and requirements of the occupation (tasks, working conditions).
- Presenting the information they have collected and discussing their perception of the occupation.

PHASE 2: Information on and Participation in the Training Process

- Assessing their skills and aptitudes with regard to printing and finishing.
- Learning about the training process: the program, learning approach, evaluation methods and certification.
- Discussing the relevance of the program to the job situation in printing and finishing.

SITUATIONAL OBJECTIVE (cont.)

PHASE 3: Evaluation and Confirmation of Career Choice

- Comparing their preferences, aptitudes and interests and personal qualities with the requirements of the occupation.
- Preparing a report justifying their career choice.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Create a climate that favours the students' personal growth and their integration into the work force.
- Encourage the students to participate in discussions and to express their opinions.
- Motivate the students to take part in the suggested activities.
- Help the students to arrive at an accurate perception of the occupation.
- Provide students with the means to evaluate their career choice honestly and objectively.
- Organize visits to businesses in the printing and finishing field.
- Ensure that the students have access to pertinent reference material such as information on the occupation, training programs and guides.
- Set up a meeting with specialists in the field.
- Arrange for graduating students to assist first-year students.

PARTICIPATION CRITERIA

- PHASE 1:**
- Gather information on most of the topics to be covered.
 - Express their views on the occupation during a group meeting, relating them to the information they have gathered.
- PHASE 2:**
- Express their opinion on some of the requirements they must satisfy in order to practise the occupation.
 - Participate in the arrangement in which graduating students assist first-year students.
 - Explain their perception of the training program during a group meeting.
- PHASE 3:**
- Write a report that:
 - sums up their preferences, interests and aptitudes;
 - explains how they arrived at the decision to follow the program.

MODULE 2: HEALTH AND SAFETY

Code: 982221

Duration: 15 hours

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 health and safety rules in a printing shop.

Specifications

At the end of this module, the students will:

- Be concerned with health and safety in the workplace.
- Be familiar with the roles and responsibilities of occupational health and safety professionals.
- Be aware of the main preventive measures applicable in a printing shop.
- Be aware of the measures to be taken in case of an accident in a printing shop.

LEARNING CONTEXT

PHASE 1: Information on Occupational Health and Safety

- Learning about general health and safety standards.
- Learning about the means available to workers for the prevention of work accidents and occupational illnesses.
- Learning about their rights and responsibilities as workers.
- Learning about the rights and responsibilities of employers.

SITUATIONAL OBJECTIVE (cont.)

PHASE 2: Familiarity with Problems and Solutions Related to Occupational Health and Safety

- Discussing the various causes and consequences of occupational illnesses associated with the occupation.
- Discussing the measures to be taken to prevent work accidents and occupational illnesses in specific situations.
- Recognizing their rights and responsibilities as workers regarding their own health and safety and that of others.
- Identifying measures and actions to be taken in the case of an accident or emergency.

PHASE 3: Evaluation of Their Ability to Recognize Health and Safety Concerns in a Work Environment

- Identifying their main concerns with respect to health and safety in their prospective workplaces.
- Listing the preventive attitudes to adopt in the areas they will be working in during the printing program:
 - offset press room;
 - screen printing room;
 - finishing room.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Organize visits to small and medium-sized businesses in the field.
- Ensure that students have access to all pertinent reference material related to the Association paritaire pour la santé et la sécurité au travail, secteur imprimerie et activités connexes (joint occupational health and safety association, printing sector and allied trades).
- Create an atmosphere conducive to the promotion of occupational health and safety.
- Encourage group discussions.
- Organize meetings with occupational health and safety professionals.

SITUATIONAL OBJECTIVE *(cont.)*

PARTICIPATION CRITERIA

- PHASE 1:**
- Listen to explanations.
 - Examine data pertaining to occupational health and safety.
- PHASE 2:**
- Discuss the observance of occupational health and safety rules.
 - Share their opinions on occupational illnesses associated with the occupation.
 - Interpret their rights and responsibilities as printing and finishing workers.
- PHASE 3:**
- Present a summary of their concerns regarding occupational illnesses related to the occupation, explaining the preventive measures associated with the various printing work stations.

MODULE 3: OFFSET PRESS SET-UP

Code: 982236

Duration: 90 hours

BEHAVIOURAL OBJECTIVE

EXPECTED OUTCOME

To demonstrate the required competency, the students must **set up an offset press** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to set up and perform maintenance tasks on an offset press
- Using:
 - specifications
 - manufacturer's instruction manual
 - blank sheets of paper
 - tools
 - ink and dampening solution
 - course notes

GENERAL PERFORMANCE CRITERIA

- Observance of health and safety rules
- Proper sequence of operations
- Compliance with manufacturer's recommendations

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Prepare the feeding system.

- Proper handling of paper
- Correct adjustment of:
 - feed table
 - feedboard
 - delivery table
 - inserting mechanism
- Regular feeding of sheets:
 - of different thicknesses
 - of different sizes

B. Prepare the dampening system.

- Correct positioning of rollers
- Proper preparation sequence
- Proper adjustment of dampening flow

C. Prepare the inking system.

- Correct positioning of rollers
- Correct technique for:
 - taking ink from the container
 - filling the ink fountain
- Proper adjustment for:
 - thickness of ink film
 - ink distribution
 - ink flow

D. Prepare the printing system.

- Accurate mounting of plate
- Verification of blanket in terms of:
 - tension
 - packing
 - surface quality
- Correct adjustment of cylinder pressure
- Accurate positioning of image:
 - squaring
 - height
 - width

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

E. Clean the feeding system.

- Proper maintenance tasks performed on:
 - feed table
 - feedboard
 - delivery table
- Complete deglazing of:
 - lower roller of inserting mechanism
 - upper feed rollers

F. Clean the dampening system.

- Proper emptying of fountain
- Proper desensitization of metal rollers
- Proper deglazing of rubber rollers
- Proper cleaning of molletons

G. Clean the inking system.

- Proper maintenance tasks performed on ink fountain
- Proper washing of rollers:
 - by hand
 - using blotting paper
 - using an automatic washer
- Proper deglazing of rollers

H. Clean the printing system.

- Proper cleaning and washing of:
 - plate cylinder
 - blanket cylinder
 - impression cylinder
- Proper deglazing of used blanket
- Accurate mounting and bedding in of blanket

I. Perform maintenance tasks on the compressor.

- Proper cleaning of filters
- Complete verification of tubing

BEHAVIOURAL OBJECTIVE *(cont.)*

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

SPECIFIC PERFORMANCE CRITERIA

J. Lubricate the press.

- Proper disassembly and reassembly of protection covers
- Proper cleaning of various mechanical parts
- Proper oiling and greasing of various mechanical parts
- Careful wiping off of excess grease and oil

K. Check safety mechanisms.

- Application of proper verification procedures

MODULE 4: QUALITY CONTROL

Code: 982244

Duration: 60 hours

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
understand their role in the quality control process.

Specifications

At the end of this module, the students will:

- Be familiar with the different aspects of quality control.
- Understand the importance of their participation in the quality control management process.
- Understand the costs resulting from poor quality.

LEARNING CONTEXT

PHASE 1: Awareness of Quality Control

- Learning about the job to be done at the preprinting, printing and finishing stages.
- Learning about the application of quality principles in the manufacturing process.
- Learning about the application of quality principles in a printing shop.
- Reflecting on the desired attitudes and behaviours for achieving quality in printing.

PHASE 2: Observation of and Participation in the Quality Control Process

- Observing concrete examples of quality control in predetermined printing shops.
- Reflecting on their responsibility in applying quality control principles in a printing shop.

SITUATIONAL OBJECTIVE *(cont.)*

PHASE 3: Awareness of Costs of Poor Quality

- Identifying factors that could result in poor quality.
- Using these case examples, assessing the costs resulting from poor quality.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Ensure that students have access to any recent and pertinent reference material, such as articles, abstracts and manuals.
- Arrange for students to meet with representatives of quality control in printing shops or invite representatives to speak to students in class.
- Provide students with tools to assist them in their reflection and analysis.
- Encourage group discussion.
- Emphasize the importance of objectivity and openness to change during discussion and reflection periods.

PARTICIPATION CRITERIA

- PHASE 1:**
- Gather information on the various topics to be covered.
 - Identify desired attitudes and behaviours for achieving quality in a printing shop.
- PHASE 2:**
- Gather information on methods for controlling quality in a printing shop.
 - Participate in activities on defining quality control procedures.
- PHASE 3:**
- Participate in activities on assessing the costs resulting from poor quality.

MODULE 5: FINISHING TECHNIQUES

Code: 982254

Duration: 60 hours

BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

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

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to apply various finishing techniques on documents
- Using:
 - specifications
 - printed documents
 - finishing machines
 - tools
 - paper
 - accessories
 - course notes
 - manufacturer's instruction manuals for machines used

GENERAL PERFORMANCE CRITERIA

- Accurate finishing
- Squaring of documents
- Safe use of equipment
- Proper handling of paper
- Observance of specifications

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Prepare the job.

- Accurate interpretation of specifications
- Proper organization of work station
- Methodical verification of printed documents

B. Fold documents.

- Correct adjustment of components of folding machine:
 - blower and suction
 - multiple-sheet control
 - feed table
 - pressure between rollers
 - plate paper stop
 - delivery table
- Type of fold in accordance with specifications

C. Gather sheets.

- Adjustment of feeding station of gathering machine according to:
 - size of paper
 - thickness of paper
- Proper adjustment of speed
- Feeding of sheets with no waste of time
- Gathering of all sheets in order
- Sheets facing the right way

D. Bind documents.

- Observance of established work method

E. Trim documents.

- Accurate adjustment of guide of guillotine
- Proper trimming of paper
- Making of cuts in logical order
- Making of cuts according to imposition
- Squareness of sheets
- Final product dimensions in accordance with instructions

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

F. Drill paper.

- Correct choice of bit.
- Accurate adjustment of:
 - front guide
 - paper stops
 - height of bit
- Holes clean and correctly positioned

G. Make pads.

- Proper counting method
- Proper stacking of paper and cardboard
- Methodical trimming of sheets
- Correct positioning of sheets with respect to paper stops
- Correct amount of pressure applied to sheets.
- Quality of pasting:
 - correct side of sheets
 - proper quantity
 - neatness
- Allotment of correct amount of time for paste to dry
- Proper separation of pads
- Accurate cutting of pads

H. Package the products.

- Observance of specifications
- Quality of packaging:
 - durability
 - neatness

I. Record the technical data.

- Correct completion of delivery slip:
 - customer's name and address
 - quantity printed
- Correct completion of specification sheet

MODULE 6: BASIC MECHANICAL ADJUSTMENTS

Code: 982262

Duration: 30 hours

BEHAVIOURAL OBJECTIVE
<p>EXPECTED BEHAVIOUR</p> <p>To demonstrate the required competency, the students must apply basic mechanical adjustment techniques in accordance with the following conditions, criteria and specifications.</p> <p>CONDITIONS FOR PERFORMANCE EVALUATION</p> <ul style="list-style-type: none">▪ Working alone▪ Using:<ul style="list-style-type: none">– an offset press– the manufacturer's instruction manuals– tools– large sheets of paper <p>GENERAL PERFORMANCE CRITERIA</p> <ul style="list-style-type: none">▪ Compliance with requirements▪ Precision of adjustments▪ Use of appropriate tools▪ Observance of the frequency of inspections▪ Compliance with the manufacturer's recommendations

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

- | | |
|--|--|
| A. Read and interpret the manufacturer's instructions. | – Accurate understanding of procedures used in instruction manuals |
| B. Adjust the dampening system. | <ul style="list-style-type: none"> – Precise adjustment of the parallelism of the plate roller(s) – Precise adjustment of the general pressure of the plate roller(s) – Precise adjustment of the pressure of the other rollers |
| C. Adjust the inking system. | <ul style="list-style-type: none"> – Precise adjustment of the parallelism of the plate roller(s) – Precise adjustment of the general pressure of the plate roller(s) – Precise adjustment of the pressure of the other rollers |
| D. Adjust the printing system. | <ul style="list-style-type: none"> – Precise adjustment of the parallelism of: <ul style="list-style-type: none"> • the master cylinder • the impression cylinder – Precise adjustment of the general pressure: <ul style="list-style-type: none"> • between master cylinder and blanket cylinder • between the blanket cylinder and impression cylinder |
| E. Adjust the inserting mechanism. | <ul style="list-style-type: none"> – Precise adjustment of the parallelism of the pull wheels – Precise adjustment of the general pressure of the pull wheels – Precise adjustment of the stop fingers |

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

F. Verify the synchronization mechanism of the feeding system.

- Proper verification of:
 - suction valve release
 - entry of sheet onto feed table
 - push guide
 - inserting mechanism
 - transfer of sheets to chain delivery

G. Replace defective parts.

- Accurate diagnosis of broken parts.

MODULE 7: PRINTING TEXT

Code: 982268

Duration: 120 hours

BEHAVIOURAL OBJECTIVE
<p>EXPECTED BEHAVIOUR</p> <p>To demonstrate the required competency, the students must print offset jobs involving text in accordance with the following conditions, criteria and specifications.</p> <p>CONDITIONS FOR PERFORMANCE EVALUATION</p> <ul style="list-style-type: none">■ Working alone to print a document with text and line drawings■ Using:<ul style="list-style-type: none">– specifications– an offset plate– blank sheets of paper– ink and dampening solution– the necessary cleaners– an offset press <p>GENERAL PERFORMANCE CRITERIA</p> <ul style="list-style-type: none">■ Observance of safety rules■ Proper sequence of operations■ Clean copies

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **print offset jobs involving text** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to print a document with text and line drawings
- Using:
 - specifications
 - an offset plate
 - blank sheets of paper
 - ink and dampening solution
 - the necessary cleaners
 - an offset press

GENERAL PERFORMANCE CRITERIA

- Observance of safety rules
- Proper sequence of operations
- Clean copies

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Prepare the job.

- Accurate interpretation of specifications
- Proper organization of work station
- Methodical verification of required quantities of paper, ink and plates according to specifications

B. Prepare the press.

- Correct adjustment of systems:
 - feeding
 - dampening
 - inking
 - printing

C. Print a proof.

- Accurate positioning of image:
 - squareness
 - height
 - width
- Accurate adjustment of register
- Inking in accordance with quality standards
- O.K. to print proof signed and dated

D. Print the job.

- Sheets fed regularly and squarely
- Sheets piled squarely on delivery table
- Proper balancing of inking and dampening
- Correct diagnosis of printing flaws
- Legible text
- Production quality in accordance with O.K. to print proof
- Observance of quantity indicated in specifications

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

E. Clean the press.

F. Tidy up the work area.

SPECIFIC PERFORMANCE CRITERIA

- Proper washing and cleaning of systems and parts:
 - dampening system
 - inking system
 - printing system
 - feeding system
 - press casings
- Proper cleaning and gumming of plates
- Storage of plates, supplies, tools, cleaners and other products in accordance with shop policy
- Placement of rags and wastage in appropriate containers
- Work station neat and clean

MODULE 8: STRIPPING AND PLATEMAKING

Code: 982284

Duration: 60 hours

BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

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

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to make minor corrections to a flat and to produce a proof
- Using:
 - specifications
 - a negative
 - a light table
 - the necessary instruments and products to make corrections
 - a printing frame
 - an offset plate
 - developing and gumming products

GENERAL PERFORMANCE CRITERIA

- Observance of safety rules
- Proper use of equipment
- Accurate use of the different instruments
- Careful handling of photosensitive material
- Use of proper work method for each step

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Prepare a flat.

- Accuracy of main lines
- Observance of limitations of the press and type of job
- Careful verification of position of elements
- Solid attachment of elements
- Accurate cutting of masking sheet (goldenrod paper)

B. Make corrections to a flat.

- Verification of positions and squareness of elements
- Proper correction of positions (e.g. addition, removal, squareness)
- Formal approval of corrections

C. Prepare an offset plate.

- Accurate choice of plate size
- Correct positioning of flat
- Successful exposure
- Proper development and gumming of plate
- Quality of plate:
 - image centred horizontally
 - image parallel to guide edge
 - proper height
- Proper identification of plate

MODULE 9: PREPARING PRINTING SUPPLIES

Code: 982294

Duration: 60 hours

BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **prepare printing supplies** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to analyze and determine needs
- Based on:
 - case examples
 - specifications
- Using:
 - the teacher's instructions
 - reference catalogues, charts and so on

GENERAL PERFORMANCE CRITERIA

- Use of appropriate terminology
- Proper use of equipment

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

- | | |
|---|---|
| A. Calculate the quantity of paper required for given dimensions. | – Accurate calculation according to: <ul style="list-style-type: none">• imposition• grain• budget• number of sheets to be cut• available equipment |
|---|---|

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

B. Cut paper.

- Appropriate determination of sequence of cuts
- Proper handling of paper
- Accurate determination of quantity of paper to be cut
- Safe use of guillotine
- Adequate verification of blade condition
- Squareness of cut paper

C. Select inks for various print jobs.

- Compatibility of ink, paper and press

D. Prepare offset inks for print job.

- Accurate determination of quantity of ink to prepare
- Proper following of recipe for mixing inks
- Good choice of basic colours
- Accurate weighing of ink quantities to be mixed
- Ink mixture in conformity with colour sample

E. Prepare dampening solution.

- Correct following of manufacturer's instructions
- Proper verification of pH and conductivity

F. Record the technical data.

- Observance of the shop's inventory practices
- Accurate recording of data on the specification sheet

MODULE 10: PRINTING SOLIDS

Code: 982326

Duration: 90 hours

BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **print offset jobs involving solids** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to print a double-sided document with reversed blocks and solids
- Using:
 - specifications
 - an offset plate
 - paper
 - ink, dampening solution and additives
 - an offset press
 - course notes
 - press manufacturer's instruction manual

GENERAL PERFORMANCE CRITERIA

- Observance of safety rules
- Clean copies
- Job performed within the specified time limit

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Plan the job.

- Accurate interpretation of specifications.

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

B. Prepare the supplies.

- Sheets squarely cut
- Quantity and dimensions of paper in conformity with specifications
- Ink preparation in conformity with specifications:
 - exact colour
 - quantity according to production needs
 - conditioning
- Proper verification of pH or conductivity of dampening solution

C. Verify offset plates.

- Complete verification:
 - image position
 - condition of printing surface
 - condition of non-printing surface
 - condition of gripper edges
- Proper adjustment of plates

D. Prepare the press.

- Correct adjustment of feeding, dampening, inking and printing systems
- Verification and accurate adjustment of:
 - inserting mechanism
 - parallelism and general pressure of dampener form
 - parallelism and general pressure of ink form
 - pressure between cylinders
 - anti-setoff system

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

E. Print a proof.

- O.K. to print proof:
 - in conformity with specifications
 - signed and dated

F. Print the job.

- Density and uniformity of inking
- Sheets fed regularly and squarely
- Sheets piled squarely on delivery table
- Correct balancing of inking and dampening
- Proper use of anti-setoff system
- Observance of quantity indicated in the specifications

G. Clean the press.

- Proper washing of dampening, inking and printing systems
- Proper cleaning of feeding system and press casings

H. Tidy up the work area.

- Proper cleaning and gumming of plates
- Storage of supplies and accessories in accordance with shop policy
- Work station neat and clean

I. Record the technical data.

- Observance of shop policy concerning:
 - general maintenance
 - mechanical adjustments
 - repairs
- Clear explanation of finishing instructions
- Completion of time sheet according to procedure

MODULE 11: SCREEN PRINTING

Code: 982318

Duration: 120 hours

BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **produce prints in screen printing** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to print a two-colour document with text, tints and solids
- Using:
 - specifications
 - film positives
 - two blank screens
 - blank sheets of paper
 - a frame exposure unit and a rinsing sink
 - inks and retarder
 - a screen printing press
 - the appropriate tools
 - course notes

GENERAL PERFORMANCE CRITERIA

- Observance of safety rules
- Work carried out methodically without wasting time or supplies

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Interpret specifications.

- Correct interpretation of instructions
- Verification that all necessary instructions are included
- Satisfactory collection of missing information

B. Prepare the screens.

- Choice of screens according to image to be printed
- Proper degreasing of screen
- Choice of emulsion according to quality sought
- Correct application of photosensitive emulsion
- Choice of imposition according to limitations
- Successful exposure
- Proper development of screen
- Complete masking of non-printing parts

C. Prepare the supplies used in screen printing.

- Accurate calculation of quantity of printing supports
- Preparation of inks in conformity with specifications:
 - colour
 - quantity
 - density
 - compatibility with the printing support

D. Prepare the screen printing press.

- Careful installation of screen
- Accurate position of feed guides
- Appropriate choice of squeegee
- Proper installation of squeegee and flood bar
- Accurate adjustment of off-contact
- Careful pouring of ink
- Accurate adjustment of path of squeegee
- Accurate adjustment of pressure of squeegee and flood bar

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

E. Print a proof.

- O.K. to print proof:
 - in conformity with specifications
 - signed and dated

F. Print the job.

- Accurate positioning of image:
 - height
 - width
 - squareness
- Sheets fed regularly
- Definition of print
- Uniformity and density of printing
- Copies clean and in conformity with proof

G. Clean the press.

- Proper washing of squeegee and flood bar
- Removal of maximum amount of ink from screens
- Proper washing of screen
- Complete cleaning of press bed
- Return of microadjustments of table to initial values
- Cleaning of press casing

H. Remove stencil from screen printing frame.

- Methodical use of screen-claiming products
- Complete elimination of ghosting
- Proper storage of screen

I. Apply finishing techniques.

- Full verification of drying of copies
- Neat stacking of sheets
- Skillful use of various finishing machines
- Squareness of documents
- Careful presentation of printed copies
- Size of copies in accordance with specifications

BEHAVIOURAL OBJECTIVE (cont.)

**SPECIFICATIONS OF THE EXPECTED
BEHAVIOUR**

SPECIFIC PERFORMANCE CRITERIA

J. Store the supplies and equipment.

- Performance of complete maintenance on tools
- Storage of ink containers, ink knives, cleaners and other products in accordance with shop policy

MODULE 12: NUMBERING AND PERFORATING

Code: 982324

Duration: 60 hours

BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **print jobs requiring numbering, perforating or scoring** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to make scores or perforations and to number printed copies
- Using:
 - specifications
 - an offset plate
 - preassembled sheets of carbonless copy paper
 - ink and dampening solution
 - an offset press with a numbering unit
 - a perforating rule
 - numbering units
 - instruction manuals

GENERAL PERFORMANCE CRITERIA

- Appropriate choice of adjustment tools
- Observance of safety rules
- Conformity with job bag instructions
- Clean copies
- Work carried out methodically without wasting time or supplies
- Job performed within the specified time limit

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

- | | |
|--|--|
| A. Plan and organize the job. | <ul style="list-style-type: none"> – Accurate interpretation of specifications – Proper verification of supplies |
| B. Prepare the job. | <ul style="list-style-type: none"> – Proper preparation of supplies – Correct verification of plates – Methodical setup of work area – Accurate determination of the position of the perforating and scoring rules on the impression cylinder |
| C. Prepare the press. | <ul style="list-style-type: none"> – Verification and adjustment of feeding, dampening, inking and printing systems |
| D. Prepare the numbering and perforating unit. | <ul style="list-style-type: none"> – Placement of perforating and scoring rules at designated stops – Accurate adjustment of cylinder and counterpressure wheels – Accurate positioning of numbering units – Proper mounting and adjustment of numbering units – Accurate adjustment of strikers – Proper installation of inking unit on press |
| E. Print a proof. | <ul style="list-style-type: none"> – O.K. to print proof: <ul style="list-style-type: none"> • in conformity with specifications • signed and dated |
| F. Print the job. | <ul style="list-style-type: none"> – Sheets fed regularly and squarely – Continuous quality control – Correct balance of inking and dampening – Perforations or scoring accurately positioned and clean – Numbering of sheets in correct order – Complete sequence of numbers |

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

G. Clean the press and numbering unit.

- Thorough cleaning of numbering units
- Proper washing of dampening, inking and printing systems
- Proper cleaning of feeding system and press casings

H. Verify printed materials.

- Complete sequence of numbers
- Accurate stacking of sheets

I. Tidy up the work area.

- Proper cleaning and gumming of plates
- Storage of supplies and accessories in accordance with shop policy
- Work station neat and clean
- Placement of rags and wastage in appropriate containers

J. Record the technical data.

- Clear indication of finishing instructions
- Observance of shop policy on:
 - general maintenance
 - adjustments
 - repairs
- Completion of time sheet according to procedure

MODULE 13: TWO-COLOUR PRINTING

Code: 982336

Duration: 90 hours

BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **print offset jobs in two colours simultaneously** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to print an offset job in two colours simultaneously
- Using:
 - specifications
 - two plates
 - a two-colour press proof
 - blank sheets of paper
 - ink and dampening solution
 - an offset press with an additional inking unit
 - the press manufacturer's instruction manual
 - tools

GENERAL PERFORMANCE CRITERIA

- Observance of safety rules
- Clean press
- Clean copies
- Job performed within the specified time limit

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Plan and organize the job.

- Accurate interpretation of instructions
- Correct determination of sequence for printing different colours

B. Prepare the job.

- Proper preparation of supplies
- Proper verification of quality of plates
- Methodical setup of work area

C. Prepare the press.

- Proper verification that press is in good working condition
- Careful verification of safety devices
- Verification and adjustment of feeding, dampening, inking and printing systems
- Proper verification of anti-setoff system
- Accurate mounting of plate

D. Prepare additional inking unit.

- Proper installation of unit
- Accurate adjustment of dampening and inking systems
- Accurate mounting of plate
- Verification and accurate adjustment of:
 - mechanism holding the unit in place
 - parallelism and general pressure of dampening roller
 - parallelism and general pressure of inking rollers
 - pressure between cylinders
- Proper conditioning of inks

E. Print a proof.

- O.K. to print proof:
 - in conformity with specifications
 - signed and dated

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

F. Print the two-colour job

- Continuous quality control
- Quick reorganization of job after solving a problem
- Conformity with quality standards
- Indication in specifications of observance of quantity

G. Clean the press and the additional inking unit.

- Proper washing of dampening, inking and printing systems
- Proper cleaning of feeding system and press casings

H. Perform maintenance tasks.

- Proper maintenance of various systems
- Proper lubrication of various mechanical parts

I. Tidy up the work area.

- Proper cleaning and gumming of plates
- Storage of supplies and accessories in accordance with shop policy
- Work station neat and clean
- Placement of rags and wastage in appropriate containers

J. Note the technical data.

- Proper completion of log with respect to:
 - general maintenance
 - mechanical adjustments
 - repairs
- Clear indication of finishing instructions
- Completion of time sheet according to procedure

MODULE 14: JOB-SEARCH TECHNIQUES

Code: 982362

Duration: 30 hours

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 **apply job-search techniques.**

Specifications

At the end of this module, the students will:

- Be familiar with the various aspects of the job-search.
- Have consulted various sources of information.

LEARNING CONTEXT

PHASE 1: Preparation for a Job Search

- Learning the steps to follow in order to find a job.
- Becoming familiar with various sources of information that may be consulted before or during the preparation of documents used in a job search.
- Learning about employers' hiring criteria in different types of companies.
- Making a list of potential employers.
- Experimenting with interview techniques.

PHASE 2: Implementation of a Job-Search Plan

- Planning the steps to be taken in a job search.
- Writing a résumé and a cover letter.
- Following the procedures outlined in their job-search plan.
- Keeping a log of the steps in their job-search plan and the steps they have taken.

SITUATIONAL OBJECTIVE *(cont.)*

PHASE 3: Evaluation of Their Job Search

- In a group meeting and using their log as a reference, giving an account of the steps they have taken.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Provide students with reference materials and examples likely to help them in their job search.
- Explain to students the different ways of using the reference materials.
- Refer students to resource persons who can help them in their job search.
- Set aside sufficient time and provide the means for students to prepare their job-search plan.
- Monitor the students' progress throughout the job-search process.
- Encourage communication and cooperation among the students.
- Encourage independence.

PARTICIPATION CRITERIA

- PHASE 1:**
- Consult the information made available to them.
 - Gather information.

- PHASE 2:**
- Write a résumé and cover letter in the proper format containing information about their work experience, training and competencies, as well as personal information and activities.
 - Submit a log containing information on each step in their job-search plan as well as a description of the steps taken.

- PHASE 3:**
- Give an account of their experience.

MODULE 15: TINTS AND HALFTONES

Code: 982278

Duration: 120 hours

BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **use tints and halftones in offset printing** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to print a document with text, halftones and screen tints
- Using:
 - specifications
 - an offset plate
 - blank sheets of paper
 - adjustment tools
 - ink and dampening solution
 - an offset press
 - instruction manuals

GENERAL PERFORMANCE CRITERIA

- Observance of safety rules
- Conformity with specifications
- Clean copies
- Work carried out methodically without wasting time or supplies
- Job performed within the specified time limit

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Plan and organize the job.

- Accurate interpretation of specifications (specification sheet or job bag)
- Thorough verification of plates
- Appropriate choice of supplies

B. Check the printing unit.

- Accurate verification and adjustment of:
 - inking system
 - dampening system
 - printing system

C. Print a proof.

- Accurate position of image according to specifications:
 - squareness
 - height
 - width
 - registration
- Accurate adjustment of register
- Inking in conformity with quality standards
- O.K. to print proof signed and dated

D. Print the job.

- Sheets fed regularly and squarely
- Sheets piled squarely on delivery table
- Correct balance of inking and dampening
- Close monitoring of quality of halftone dots
- Indication in specifications of observance of quantity

E. Clean the press.

- Proper washing of dampening, inking and printing systems
- Proper cleaning of feeding system and press casings

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

F. Tidy up the work area.

- Cleaning and storage of plates, ink containers, ink knives, tools, cleaners and other products in accordance with shop policy
- Placement of rags and wastage in appropriate containers
- Clean and neat work table
- Clean floor

G. Record the technical data

- Observance of shop policy on:
 - general maintenance
 - mechanical adjustments
 - repairs
- Completion of time sheet according to procedure

MODULE 16: TEAMWORK

Code: 982372

Duration: 30 hours

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
work as a team to print documents.

Specifications

During this module, the students will:

- Apply the knowledge and techniques acquired during their training.
- Develop their ability to work in a team.
- Learn to recognize the importance of each team member's role.

LEARNING CONTEXT

PHASE 1: Preparation for Teamwork

- Participating in forming teams.
- Discussing the attitudes and behaviours to adopt in order to facilitate teamwork.

PHASE 2: Preparation for Print Job

- Planning the work: making a list of the steps to be completed, setting deadlines and assigning tasks to team members.
- Carrying out the tasks assigned, such as preparing the supplies, printing, finishing and packaging.
- Participating in team meetings to determine the progress of the project.

SITUATIONAL OBJECTIVE (cont.)

PHASE 3: Evaluation of Work and Team Experience

- Evaluating the quality of the work done by the team.
- Assessing their experience by specifying:
 - the difficulties encountered and the measures taken by the team to overcome them
 - their strengths and weaknesses with respect to the way they work in a team
 - ways to improve the team's productivity

INSTRUCTIONAL GUIDELINES

The teacher should:

- Assign the students projects that correspond to their knowledge and skills.
- Encourage discussion between team members.
- Ensure that team members respect each other during these discussions.
- Encourage and support students who are having difficulty with the printing tasks.

PARTICIPATION CRITERIA

- PHASE 1:**
- Participate in discussions.
 - Take the necessary steps to become part of the team.
- PHASE 2:**
- Present the planning carried out as a team.
 - Consult the other team members throughout the project.
 - Work at a pace suitable for the rest of the team.
 - Carry out the work assigned to them.
- PHASE 3:**
- Participate in verifying the work.
 - Recognize their strengths and weaknesses with respect to the way they work in a team.

MODULE 17: FOUR-COLOUR PRINTING

Code: 982388

Duration: 120 hours

BEHAVIOURAL OBJECTIVE

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **produce offset four-colour prints** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to print a document in four colours
- Using:
 - specifications
 - a colour proof
 - offset plates
 - paper
 - four colours of ink and a dampening solution
 - an offset press
 - a densitometer
 - course notes
 - reference material

GENERAL PERFORMANCE CRITERIA

- Observance of safety rules
- Clean press
- Documents in conformity with quality standards

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Prepare the job.

- Correct interpretation of production specifications
- Efficient planning and organization of job
- Proper preparation of supplies
- Thorough verification of plates

B. Prepare the press.

- Proper verification of the working condition of the press
- Correct start-up of feeding, dampening, inking and printing systems
- Verification and accurate adjustment of inserting mechanism and printing unit

C. Print a proof.

- O.K. to print proof for each colour:
 - in conformity with specifications
 - signed and dated

D. Print the job.

- Continuous quality control using densitometer and colour control bars
- Print quality
- Clean copies

E. Clean the press.

- Proper washing of dampening, inking and printing systems
- Proper cleaning of feeding system and press casings
- Performance of maintenance tasks on all systems

F. Tidy up the work area.

- Proper cleaning and gumming of plates
- Storage of supplies and accessories in accordance with shop policy
- Work station neat and clean
- Placement of rags and wastage in appropriate containers

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

G. Record the technical data.

SPECIFIC PERFORMANCE CRITERIA

- Proper completion of log:
 - quantity of prints produced
 - densitometer values for each colour
- Completion of time sheet according to procedure

MODULE 18: FOUR-COLOUR SCREEN PRINTING

Code: 982384

Duration: 60 hours

BEHAVIOURAL OBJECTIVE
<p>EXPECTED BEHAVIOUR</p> <p>To demonstrate the required competency, the students must print four-colour jobs in screen printing in accordance with the following conditions, criteria and specifications.</p> <p>CONDITIONS FOR PERFORMANCE EVALUATION</p> <ul style="list-style-type: none">■ Working alone to print a document in four colours■ Using:<ul style="list-style-type: none">– specifications– silk screens– paper– four colours of ink– ink additives– a screen printing press– a densitometer <p>GENERAL PERFORMANCE CRITERIA</p> <ul style="list-style-type: none">■ Observance of safety rules■ Neat and clean work area■ Observance of quantity indicated in the specifications■ Documents in conformity with quality standards

EXPECTED BEHAVIOUR

To demonstrate the required competency, the students must **print four-colour jobs in screen printing** in accordance with the following conditions, criteria and specifications.

CONDITIONS FOR PERFORMANCE EVALUATION

- Working alone to print a document in four colours
- Using:
 - specifications
 - silk screens
 - paper
 - four colours of ink
 - ink additives
 - a screen printing press
 - a densitometer

GENERAL PERFORMANCE CRITERIA

- Observance of safety rules
- Neat and clean work area
- Observance of quantity indicated in the specifications
- Documents in conformity with quality standards

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

A. Prepare the job.

- Correct interpretation of production specifications
- Efficient planning and organization of job
- Proper preparation of silk screens
- Proper preparation of supplies

B. Prepare screen printing press.

- Careful installation of screens
- Accurate positioning of feed guides
- Appropriate choice of squeegee
- Proper verification and installation of squeegee and flood bar
- Accurate adjustment of off-contact
- Careful pouring of ink
- Accurate adjustment of path of squeegee
- Accurate adjustment of pressure of squeegee and flood bar

C. Print a proof.

- O.K. to print proof for each colour:
 - in conformity with specifications
 - signed and dated

D. Print the job.

- Sheets fed regularly
- Definition of screen dots
- Uniformity and density of inking
- Copies clean and in conformity with O.K. to print proof

E. Clean the press.

- Proper washing of squeegee and flood bar
- Removal of maximum amount of ink from screens
- Complete cleaning of press bed
- Return of microadjustments of table to initial values
- Cleaning of press casing

BEHAVIOURAL OBJECTIVE *(cont.)*

SPECIFICATIONS OF THE EXPECTED BEHAVIOUR

SPECIFIC PERFORMANCE CRITERIA

- | | |
|---|---|
| F. Remove stencil from screen printing frame. | <ul style="list-style-type: none"> – Methodical use of screen-claiming products – Complete elimination of ghosting – Proper storage of screen |
| G. Tidy up the work area. | <ul style="list-style-type: none"> – Performance of complete maintenance tasks on equipment – Storage of ink containers, ink knives, cleaners and other products in accordance with shop policy |
| H. Record the technical data. | <ul style="list-style-type: none"> – Proper completion of log: <ul style="list-style-type: none"> • general maintenance • mechanical adjustments • repairs – Clear explanation of finishing instructions – Completion of time sheet according to procedure |

MODULE 19: ENTERING THE LABOUR MARKET

Code: 982398

Duration: 120 hours

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 labour market.**

Specifications

During this module, the students will:

- Familiarize themselves with their role in the workplace.
- Carry out tasks in a company.
- Become aware of the different changes in perception that result from a practicum in the workplace.

LEARNING CONTEXT

PHASE 1: Preparation for the Workplace Practicum

- Learning about the terms and conditions of the practicum.
- Learning about the organizational structure of the company.
- Situating themselves in the organizational structure of the company with respect to their tasks and position.

PHASE 2: Observation of and Participation in Occupational Activities

- Observing the work environment.
- Participating or performing in a variety of occupational tasks.
- Ensuring that the practicum supervisor is satisfied with their performance.
- Giving an account of their observations with respect to the work environment and the tasks carried out during the practicum.

SITUATIONAL OBJECTIVE *(cont.)*

PHASE 3: Re-evaluation of Initial Perceptions

- Comparing their perception of the occupation before and after the practicum.
- Assessing the influence of this experience on their choice of a future job.

INSTRUCTIONAL GUIDELINES

The teacher should:

- Maintain close collaboration between the school and the company.
- Make it possible for students to observe and perform occupational tasks.
- Ensure that the students are supervised on an ongoing basis by a designated person at the practicum site.
- Provide students with regular support and follow-up.
- Intervene if problems or difficulties arise.
- Encourage self-expression and discussion among the students, particularly when they are re-evaluating their initial perceptions in light of their experience in the workplace.

PARTICIPATION CRITERIA

- PHASE 1:**
- Gather information on the practicum and the organizational structure of the company.
 - Describe the tasks they will be performing.
- PHASE 2:**
- Follow the company's instructions with respect to trainee tasks, work schedules and professional ethics.
 - Write a report presenting their observations on at least five aspects of the work environment and describing the tasks performed during the practicum.
- PHASE 3:**
- Summarize their work experience, indicating what influence it will have on their future choice of a job.

Éducation

Québec 

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