

Course  
**Computer Environment Awareness**  
**CMP-P101-1**  
Presecondary





“Discovery consists of seeing what everybody has seen and thinking what nobody has thought.”

Albert Szent-Gyorgyi

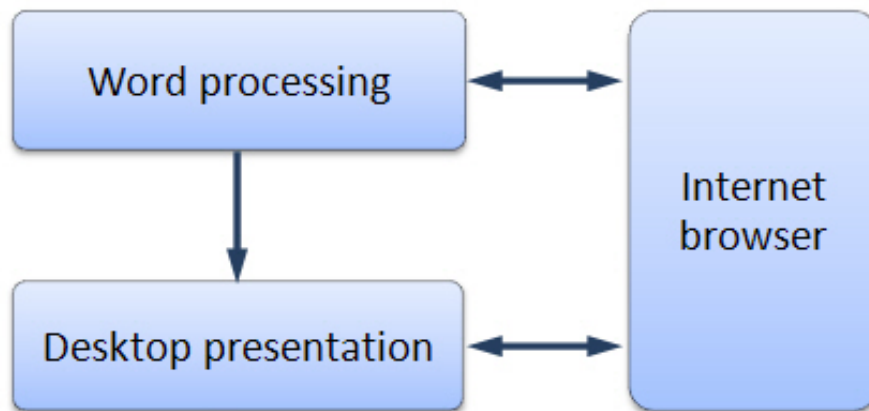
## Presentation of the Course *Computer Environment Awareness*

The course *Computer Environment Awareness* is designed to help adult learners deal competently with real-life situations that require familiarity with a computer environment.

The course prepares adult learners to understand and to use the basic functions of different computer applications. It includes practical learning about certain notions of word processing, Web

searches and the use of desktop presentation software. As a result, adult learners are able to discover some of the concepts they need to make effective use of a computer environment.

By the end of the course, adult learners will be able to apply what they have learned to situations in their everyday lives and in their training and education.



## Dealing With the Real-Life Situations

Dealing effectively with real-life situations is based on actions. These actions are grouped into categories and make use of a set of resources that include operational competencies and essential knowledge. During the learning process, adults are expected to construct knowledge related to these resources in order to be able to deal appropriately with their real-life situations.

The class of situation, categories of actions, operational competencies and essential knowledge constitute the compulsory elements of the course. These elements are explained in detail under their respective headings.



## Class of Situations Addressed by the Course

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This course addresses a single class of situations: *Becoming more familiar with the computer environment.*

Computers are present in many aspects of human activity, and adults must use computer technology on a daily basis in their personal, professional and family lives, as well as for their education. For example, real-life situations such as writing letters, keeping up with current events and helping children with their

homework all require the use of computer applications. Consequently, adult learners must be familiar with the computer environment and with the use of basic computer equipment and applications.

| Class of Situations                                  | Examples of Real-Life Situations   |
|--|--|
| Becoming more familiar with the computer environment | <ul style="list-style-type: none"><li>▪ Corresponding with other people, for personal or business reasons</li><li>▪ Using a computer to help children with their homework</li><li>▪ Keeping up with current events using a computer</li><li>▪ Using a word processing program to transcribe schoolwork</li></ul> |

## Categories of Actions

The *categories of actions* are groups of actions that are appropriate for dealing with the real-life situations addressed in the course. *Examples of actions* are provided to illustrate the scope of the category in a variety of contexts.

| Categories of Actions  | Examples of Actions   |
|--|---|
| <ul style="list-style-type: none"> <li>▪ Using the appropriate software application</li> </ul> | <ul style="list-style-type: none"> <li>▪ Makes a purchase</li> <li>▪ Creates a short slide show using desktop presentation software</li> <li>▪ Sends e-mails</li> <li>▪ Writes short letters</li> <li>▪ Uses courseware or drill-and-practice software</li> <li>▪ Consults help files</li> <li>▪ Obtains information on the Internet</li> </ul> |
| <ul style="list-style-type: none"> <li>▪ Managing files and folders</li> </ul>                 | <ul style="list-style-type: none"> <li>▪ Files documents</li> <li>▪ Deletes unwanted files and folders</li> <li>▪ Locates and restores lost or deleted documents</li> </ul>   |
| <ul style="list-style-type: none"> <li>▪ Organizing the desktop environment</li> </ul>         | <ul style="list-style-type: none"> <li>▪ Arranges elements on the desktop</li> <li>▪ Personalizing the display parameters, including the wallpaper, resolution and colour scheme</li> </ul>   |

## Compulsory Elements and End-of-Course Outcomes

The compulsory elements are those that the teacher must absolutely take into account when developing learning situations.

### Class of Situations

Becoming more familiar with the computer environment

### Categories of Actions

- Using the appropriate software application
- Managing files and folders
- Organizing the desktop environment

### Operational Competencies

Acts methodically

- Follows instructions to the letter
- Identifies the requirements of the task at hand
- Selects the appropriate application and commands
- Determines the sequence of steps
- Evaluates the process

### Essential Knowledge

- Basic elements
- Elements of a software application
- Arranging the desktop and windows
- Glossary

The end-of-course outcomes describe how adults make use of the compulsory elements to deal with the real-life situations addressed in the course.

### End-of-Course Outcomes

In order to deal with situations in the class *Becoming more familiar with the computer environment*, adult learners identify the requirements of the task to be performed using a computer, select the appropriate software application and commands, and determine the sequence of steps.

When performing the task, adult learners carefully follow all instructions and arrange the desktop elements and windows in order to achieve the best possible working environment. After launching the application, they use the toolbar and menus so as to work as effectively as possible. During the process, they regularly assess their process and product, and make any adjustments that may be required. Where necessary, they use the application's "Help" function.

When entering data or text, they demonstrate their knowledge of key combinations and are comfortable handling the mouse.

Once the task is complete, they must save the document. To do this, they record their work on a storage medium and build a filing system that allows them to access their files easily. They give meaningful names to the documents they produce, and save them in the appropriate folders. Where necessary, they create, rename, move and delete files or folders to ensure proper file management. As a result, they are able to save the documents they use or create, and find them quickly when they need them.

## Evaluation Criteria

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- Correctly uses an application
- Manages files and folders efficiently
- Arranges the computer environment appropriately



## Operational Competencies

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The contribution of each operational competency is described in terms of the actions that are appropriate for dealing with the real-life situations in the course. These operational competencies are addressed in other courses and therefore all of the courses taken together contribute to their development.

In this course, only the following operational competency is addressed: *Acts methodically*.

### Contribution of the Operational Competency *Acts methodically*

The operational competency *Acts methodically* helps adult learners deal effectively with situations related to the class *Becoming more familiar with the computer environment*. It helps adult learners to identify the requirements of the task and perform it effectively using a computer.

Adult learners consider the task to be performed and follow the instructions carefully. They select an appropriate application and commands, organize the desktop environment, manage their folders, identify the commands and determine the steps required to enter, save and print a document. When assessing their work, they may make improvements and reinvest what they have learned by identifying other contexts in which their learning can be applied and expand their knowledge.

The operational competency *Acts methodically* therefore allows adult learners to gather the resources they need to deal with a given situation, and to select an effective working method that will enable them to complete the task successfully.

## Essential Knowledge

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The elements of essential knowledge shown in parentheses are provided as suggestions only.

### Basic elements

- Switching hardware on and off, launching and quitting software applications, and starting and ending sessions
- Keyboarding
  - Posture
  - Key combinations (uppercase, accented characters, typographic symbols)
  - Deleting letters
  - Keyboard shortcuts:
    - Cut-copy-paste, save, print
- Using the mouse
  - Selecting and moving text
  - Right-clicking to activate pop-up menus
- Organizing windows
  - Structural elements:
    - Work area, title bars, menus, tools and scrolling
  - Active elements:
    - Icons, commands
- Managing documents
  - Creating and deleting folders
  - Copying and moving files and folders
  - Changing file and folder names
  - Recovering lost or deleted files

### Application elements

- Word processing applications, desktop presentation applications, Internet browsers

- File management commands:
  - New, open, save, print, close, exit
- Editing commands:
  - Cut, copy, paste, undo, restore
- Formatting commands:
  - Character attributes (font, size, colour, bold, italic, underline)
  - Paragraph alignment
- Insertion commands (inserting an image)
- Correction commands (spelling, grammar, synonyms)
- On-line help
- Desktop presentations:
  - Slides, transitions, animation, text box
- Internet browser:
  - Address bar, favourites, back, forward

### Organizing the desktop environment and windows

- Arranging icons on the desktop
- Arranging windows
  - Size, display, hide

### Glossary

- Usual symbols
- Basic computer vocabulary (components, menus and commands)

## Attitudes

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The following attitudes are provided as suggestions only. The development of these attitudes can help adults become more competent in dealing with the real-life situations in this course.

| Curiosity  | Perseverance   |
|--|--|
| <p>Curiosity encourages adults to try new experiences and review those that do not work, in order to progress on their own. The field of computer technology is in constant evolution, and adults who develop curiosity are more likely to update their skills, seek out new products and features and explore specific aspects of the field. Often, curiosity drives adults to excel at what they do.</p> | <p>Adult learners who work hard understand that every person develops at his or her own pace, and that mistakes are an integral part of progress. Adults who are able to develop perseverance have the psychological resources required to progress and succeed in life.</p> |
| Attention to Detail  |  |
| <p>Attention to detail is needed to produce good quality work. Adults learn to work accurately and to improve their standards when revising their documents and making any necessary corrections. Their goal is to hand in a finished product with which they are satisfied. Attention to detail is reflected in every area of the adult learner's activities.</p>   |  |

## Complementary Resources

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The following resources are provided as suggestions only and consist of references that may be consulted in learning situations.

| Social Resource   | Material Resources   |
|---|--|
| <ul style="list-style-type: none"><li>▪ Guest speaker who is an expert in a related field</li></ul> | <ul style="list-style-type: none"><li>▪ Computer, printer</li><li>▪ Operating system</li><li>▪ Word processing application, desktop presentation software</li><li>▪ Browser, utilities</li><li>▪ Digital projector</li><li>▪ Reference books</li></ul> |

## Contribution of the Subject Areas

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The contribution of other subject areas, in particular knowledge related to Languages, is also useful for dealing with the real-life situations in this course. The elements identified for each subject area are not compulsory and do not constitute prerequisites.

### Subject Area: Languages

#### **Program of Study: *English, Language of Instruction***

Knowledge of the language of instruction contributes significantly to learners' capacity to use a computer to search for information, communicate with others, produce documents and collaborate on group projects. The content of the written messages that adult learners receive and produce depends on the language resources they have constructed, particularly their reading and writing skills with respect to the type of discourse concerned, and this is true whether the message is conveyed in print, handwriting or electronically. These skills are developed throughout all the courses in the English, Language of Instruction program. In addition to the language resources that are specific to the situation and the messages being conveyed, the capacity to use a computer for these purposes depends in particular upon:

- Oral interaction to obtain and give information and instructions (e.g. regarding steps and procedures to follow when using a computer)
- Decoding strategies (e.g. to interpret computer-specific terminology, symbols, icons, abbreviations)
- Reading to obtain information and instructions (e.g. help menus, pop-up messages, instruction manuals for computer software)

## Andragogical Context

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Computers are now present in every sector of human activity, and it is essential for today's adult population to understand how they work and how they should be used. The courses in the *Computer Science* program develop the ability of adult learners to understand the computer environment, produce documents and search for, process and manipulate information. More specifically, the courses enable adult learners to identify similarities between different software applications and use this basic information to transfer their learning from one application to another.

The learning derived from the program is essential for helping adults integrate into the work force, function in their social and cultural environment and in their education and training activities, regardless of their level of schooling. The ability to use a computer is an advantage in their everyday lives and especially in their learning. Adult learners who own or have access to a computer will benefit from it on a daily basis.

Adult learners build on their prior knowledge through learning acquired by thinking, acting and interacting with the people around them, every time the learning context allows them to do so. Discovery and individual exercises are always available, but are used with the goal of building new knowledge or applying prior knowledge. Feedback allows adult learners to assess their own progress, take corrective action where necessary, and realize how their knowledge of computers can be applied in their everyday lives.

Learning is acquired gradually in this course. Adult learners begin by addressing general notions, which they enrich and apply in the classroom or laboratory through situational reconstructions and other appropriate activities. They may then be asked to apply their newly constructed knowledge to real-life situations.

If their learning is to be effective, it must be structured by means of an appropriate pedagogical method. Although pedagogical methods and techniques are specific to each training centre and adapted to the teacher's own abilities, they should nevertheless be alternated in order to diversify the learning conditions and provide adult learners with different ways of building their knowledge. This approach will also increase the learners' motivation and encourage them to work harder. It is therefore important to allow time for sharing knowledge, experiences and ideas. A broad range of learning activities will provide plausible topics through which adult learners are able to apply the concepts addressed in the course.

## Learning Situation

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The learning situation that follows is provided as an example to show teachers how the principles of the education reform can be applied in the classroom.

It is authentic in the sense that it addresses a real-life situation (taken from the class of situations in the course) that adults may find themselves in. It is sufficiently open and comprehensive to allow adult learners to explore several important aspects related to dealing with this real-life situation.

The examples of actions presented in the course help the teacher to identify those actions that an adult would take to deal with the real-life situation. The teacher can then refer to these examples in order to develop pertinent learning activities.

The learning situation is organized in terms of the three steps of the teaching-learning process, which are as follows:

- planning learning
- actual learning
- integrating and reinvesting learning

These steps highlight the principles of the education reform insofar as they encourage adults to be active, to reflect on their learning and to interact with their peers when the learning context is suitable. They include learning activities and may also include evaluation activities intended to support adults in the learning process.

These activities help learners to construct knowledge related to the compulsory elements of the course that are targeted by the learning situation concerned: one or more categories of actions, essential knowledge and the actions of the operational competencies associated with the categories of actions.

The example provided also refers to certain teaching strategies—pedagogical methods and techniques—that can be selected according to the learners, the context and the learning environment. Certain learning strategies may also be suggested, as well as a variety of material and social resources.

## Example of a Learning Situation

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### Applying for a Job

One of the real-life situations chosen for the course *Computer Environment Awareness* involves maintaining correspondence using a word processing application. In this learning situation, adults are asked to write a letter in response to an offer of employment.

At this stage in the process, adult learners have already begun to learn about word processing. For example, they have been introduced to the notions of character attributes and paragraph alignment, and have performed practice exercises. When preparing the learning situation, the teacher writes and prints a short offer of employment, making sure he or she has one or more model letters of application. To cover all possibilities, the teacher should also bring some newspapers to class, and identify a number of job search Web sites.

The teacher motivates the class by pointing out that the summer vacation is fast approaching, and it is time to start thinking about finding a summer job. He or she asks about the adult learners' plans for the summer, encouraging them to talk about their interests and expectations, and then begins the learning activity by handing out copies of the offer of employment. The offer is from a municipality that is looking for volunteers to lead its summer leisure activities. As the discussion continues, the teacher asks the adult learners for their impressions. Would they respond positively or negatively to the offer? How would they set out their letter (elements, layout, typeface, etc.), and what tone or level of language would they adopt?

The teacher then hands out a model letter of application, which the adult learners can either use as a basis for their own letter, or adjust to suit the situation at hand. Using the digital projector, the teacher and class identify the basic page layout elements. The adult learners write the instructions directly on their model letters. The teacher then asks them to prepare an individual response to the offer. Using a word processing application, they enter, save and print a one-page letter of application, following the page layout instructions and using the model letter as their basis. Newspapers containing offers of employment and Internet job search sites are also available for those adult learners who prefer to answer a different offer.

During the activity, the teacher walks around the classroom, provides guidance to adult learners, and interrupts the process where necessary to review certain points or make adjustments. The adult learners keyboard their letter, adjusting the content of the model to suit their own needs. They refer to the formatting and page layout guidelines, save their document as instructed by the teacher, and print out a copy. When rereading their text, they make sure the various elements have been properly formatted, and that there are no spelling mistakes. Where necessary, they may consult the application's help function, use a reference book or open the Web browser to search for additional information. Although this is an individual project, the more advanced adult learners may help their peers, taking care not to do the exercise for them.



Throughout the learning situation, adult learners apply their prior knowledge (e.g. word processing application, keyboarding text, document management) and build new knowledge (e.g. formatting a business letter) in a context that is relevant to their own lives.

The teacher then proposes a final activity to complete the learning situation. In this activity, the teacher plays the role of a potential employer, presents some of the letters to the class, and comments on them. He or she then asks the adult learners to talk about what they have learned and any problems they encountered. The teacher then summarizes what they have learned and lists the operational competencies addressed by the exercise.

## Elements of the Course Addressed by the Learning Situation

| Class of Situations  |  |
|--|--|
| Becoming more familiar with the computer environment   |  |
| Learning Situation   |  |
| Applying for a Job   |  |
| Categories of Actions  |  |
| <ul style="list-style-type: none"> <li>Using the appropriate software application</li> <li>Managing files and folders</li> </ul>                           |  |
| Operational Competency   | Essential Knowledge  |
| <ul style="list-style-type: none"> <li>Acts methodically</li> </ul>  | <ul style="list-style-type: none"> <li>Basic elements</li> <li>Elements of an application</li> <li>Organizing the desktop and windows</li> <li>Glossary</li> </ul> |
| Complementary Resources  |  |
| <ul style="list-style-type: none"> <li>Computer, printer</li> <li>Word processing, help files, instructions for users</li> <li>Internet browser</li> </ul> | <ul style="list-style-type: none"> <li>Newspapers</li> <li>Internet job search sites</li> <li>Model letters</li> </ul>   |

