



Generalitat de Catalunya
Institut Català
de les Qualificacions Professionals

PROFESSIONAL QUALIFICATION
PROMOTION OF ICT
FACILITIES

PROFESSIONAL FAMILY
SOCIOCULTURAL AND COMMUNITY SERVICES



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PROMOTION OF ICT FACILITIES

CODE SC_1-980_3

PROFESSIONAL FAMILY
SOCIOCULTURAL AND COMMUNITY SERVICES

CD 02-04-2012



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Professional qualification
Promotion of ICT Facilities

Professional Family: Sociocultural and Community Services

Professional area: (SCE) - Training and Education

Level: 3

Code: SC_1-980_3

General Competence

To promote and manage ICT Facilities, ensure their operation and effectiveness, attend and advise the general public, design and deliver suitable training, whilst promoting empowerment and improving end users' ICT skills.

Competence units

UC_1-9910-11_3	To manage financial resources and infrastructure and manage ICT area teams.
UC_1-9911-11_3	To manage and maintain technological resources in ICT Facilities.
UC_1 9912-11_3	To define and implement public relations policies and programmes in ICT Facilities.
UC_1-9913-11_3	To manage communication both with and among users in the day-to-day running of ICT Facilities.
UC_1-9914-11_3	To carry out ICT facility activity independently or in teams.
UC_1-9915-11_3	To train internal and external users of ICT Facilities.

Professional setting

Professional field

Professional activity is usually carried out in telecenters or ICT Facilities, which are either public access centres or part of a company structure.

Productive sectors

Given their cross-sectorial nature, they are present in all business spheres, deriving from the need of companies and institutions to treat and administer their information and to be able to count on qualified staff to do so. They are especially present in areas managed by institutions and public administrations, thereby fostering the use, learning and ownership of ICT.

Related occupations and positions

ICT facilitator

e-facilitator

ICT facility manager

Related learning (600 hours)

Learning modules:

- MF_1-9910-1111_3** Resources and the professional team in ICT Facilities. (90 hours)
- MF_1 9911-1111_3** Technological resources in ICT Facilities. (60 hours)
- MF_1-9912-1111_3** Programming of dissemination and promotion of ICT Facilities and communication with their catchment area. (90 hours)
- MF_1-9913-1111_3** Communication and action in ICT Facilities. (120 hours)
- MF_1 9914-1111_3** Planning, scheduling and execution of ICT area activity. (120 hours)
- MF_1 9915-1111_3** Training in ICT Facilities. (120 hours)

Competence unit 1: To administrate financial resources and infrastructure and manage an ICT facility team.

Code: UC_1-9910-11_3

Level: 3

Occupations / Related jobs

ICT facilitator
e-facilitator
ICT facility manager

Professional performance and performance criteria:

PP1 To control available economic resources and materials, and identify new fundraising opportunities.

PC1.1 Human financial and material resources, are clearly identified at all times, as is their degree of availability.

PC1.2 Scheduling of activities includes a comprehensive description of human financial and material resources, and their availability should be checked at the time of carrying them out.

PC1.3 Documents regarding charges and payment –cheques, bank transfers and so on- are checked against such transactions' supporting documentation –bills, pay slips, etc. ensuring that all data is accurate.

PC1.4 The counting of cash, cheques and other credit or debit documents is carried out at cash desk closure, in accordance with established procedure.

PC1.5 New fundraising opportunities are selected based on the appropriateness and priority of their aims, and the amount, in the case of financial resources.

PC1.6 Involvement in the drafting of the technical project accompanying the request for financial assistance, whilst ensuring its internal coherence and content.

PP2 To organize access to facilities and end-user support, setting timetables in accordance with scheduled services and activities.

PC2.1 Scheduling of free access to facilities, personal attention and other activities are set with the aim of ensuring the best possible care for the users' needs, avoiding overlapping activities and overbooking of resources.

PC2.2 Opening hours and timetables of regular activities are explained and handed out on users' first visit and any changes are notified.

PC2.3 Timetabling of the various activities is organized in accordance with the availability of human and material resources as well as end user needs.

PC2.4 Notification of specific or periodical activities is made by means of mailing systems and/or announcements on bulletin boards, on a regular basis and with sufficient prior notice.

PP3 To organize and maintain an up-to-date register of data and user profiles.

PC3.1 The information on people is collected reflecting their skills and needs, as well as personal data, which is indispensable to handle future situations.



PC3.2 The information is systematised in a database following criteria of reliability and ease of update.

PC3.3 The user database is kept taking into account its usefulness, availability and data protection regulations.

PP4 To monitor compliance with the facility operating regulations.

PC4.1 The facility operating regulations are written clearly and concisely, in order to ensure the maximum use and upkeep of materials and devices by as many people as possible.

PC4.2 Operating regulations are clearly visible from anywhere in the facility.

PC4.3 Operating regulations are explained and issued on the first visit to the facility.

PC4.4 Persons involved are warned about the failure to meet performance standards and the possible consequences of their repetition are explained.

Emotional Skills

Problem solving

- Eliminates the cause of a problem to prevent it from recurring.

Resource management

- Is able to plan a wide range of resources and generate new management procedures.

Project planning

- Is able to manage several projects simultaneously within the same work context.

Lateral leadership

- Takes responsibility for the work of his/her team, including both its success and failure.

Teamwork

- Collaborates and shares plans, information and resources.

Cognitive Skills

Systemic Thinking

- Takes decisions bearing in mind the various elements and relationships that make up the structure.

Analytical Reasoning

- Is able to deal with a complex task by breaking it down into manageable parts.

Synthetic Reasoning

- Comes up with effective solutions by merging the different elements involved.

Professional context

Means of production

Information processing materials: office, computer hardware, software and reprographic equipment.

Space and time management tools.

Model orders, invoices and receipts.

Electronic means of payment.

Products and results

Users' records and databases.
Accounting and financial information.
Temporary space and resource availability charts.

Used or generated information

Internal rules for use of facilities and materials.
Basic accounting manuals.
Current legislation on protection of personal data.

Competence unit 2: To manage and maintain the technological resources in ICT Facilities.

Code: UC_1-9911-11_3

Level: 3

Occupations / Related jobs:

ICT facilitator
e-facilitator
ICT facility manager

Professional performance and performance criteria:

PP1 To install and adjust the hardware, operating systems, software and peripherals in ICT Facilities.

PC1.1 The design of the facility and the selection of hardware, operating systems, peripherals and software takes into account the objectives of the ICT facility, the needs of potential users and the types of activities to be performed.

PC1.2 The reception of incoming equipment and components is accompanied by established procedure regarding documentation, labelling, registration, storage and handling, whilst ensuring proper positioning, environmental conditions and security measures in accordance with regulations.

PC1.3 The technical specifications of the devices and the general security policy of the organisation are acquainted with and interpreted properly for system adaptability.

PC1.4 Accompanying documentation for hardware installation and detailed reference to the documents generated and stored appropriately for later use.

PC1.5 The technical documentation is interpreted correctly whether it be published in Spanish, Catalan, or the most commonly used foreign language in the industry.

PP2 To configure the connection to the external network (Internet) and local network (Intranet).

PC2.1 Server operating system and workstations are installed in accordance with the procedures in the technical documentation.

PC2.2 Verification of operating system components and device drivers are carried out by testing the boot and shutdown, and the use of software tools for testing and diagnosis, thereby checking that the components are recognised and enabled, and conflicts do not appear as provided for by the organisation.

PC2.3 The configuration of network parameters is set to connect the server in accordance with system network design and the organisation's safety and quality standards and regulations.

PC2.4 Access to and permissions for server resources and workstations are configured for users according to their needs, the type of activities planned and the security policy of the organisation.

PP3 To install suitable software according to users' needs and safety criteria in place.

PC3.1 Software to be installed is chosen taking into account the ICT facility's objectives, potential users' needs and the type of activities planned.



PC3.2 Software installation instructions are described and referenced in the documents generated and stored appropriately for later use.

PC3.3 Software is installed effectively to ensure system integrity, fulfilling the requirements laid down by the organisation and in accordance with the technical documentation.

PC3.4 The relevant details of the installation and any incidents occurring during the process are recorded in the documentation, according to the procedure established by the organisation.

PC3.5 Verification of the software running on the whole system is performed according to safety and quality procedures established by the organisation and the manufacturer.

PP4 To maintain equipment according to needs, problems or obsolescence.

PC4.1 Hardware, physical system components and software elements are correctly identified and listed thoroughly to determine their current availability.

PC4.2 Hardware and software are analyzed and evaluated to report possible future needs and the feasibility of possible improvements and updates.

PC4.3 Physical devices and programmes available on the market are evaluated to propose the most suitable for the system, the aim and customary activities of the ICT Facilities.

PC4.4 New acquisitions, changes in hardware or software or its settings are recorded in the inventory to keep it updated.

PC4.5 The introduction of new devices and/or programmes is planned and executed, while minimising its effects on the operation system performance and optimizing and adapting the technology as the market evolves.

PC4.6 Required updates to the server operating system, and the rest of the software are carried out effectively, ensuring system integrity, their suitability, and following the organisation's safety regulations.

PC4.7 Protection systems (antivirus, firewall, etc.) certified by the organisation are installed on all computers, with automatic update turned on and periodically checked.

PC4.8 Necessary repairs to ensure proper functioning of the hardware are performed, following the manufacturer's specifications or by employing accredited professionals, taking into account financial and quality criteria.

Emotional Skills

Problem solving

- Eliminates the cause of a problem to prevent it from recurring.

Learning

- Learns from both experienced and observed situations.

Orientation toward service

- Accepts the viewpoint of internal and external users.

Innovation

- Keeps up to date on the latest trends and innovation.

Cognitive Skills

Systemic Thinking

- Manages and changes internal processes so that they help to improve others.

Abstract Reasoning

- Identifies patterns in a logical sequence and has the resources to complete the sequence.

Analytical Reasoning

- Is able to deal with a complex task by breaking it down into manageable parts.

Synthetic Reasoning

- Comes up with effective solutions by merging the different elements involved.

Professional context

Means of production

Access devices: computers and peripherals (scanners, printers, cameras, etc.)

Hardware required: routers, wiring, etc.

Software package required for activities, with a user license.

Internet access.

Products and results of work

Computer incident logbook.

Equipment updated and running.

Information used or generated

Hardware use plan.

Maintenance plan.

Technical specifications of hardware available.

Competence unit 3: To define and carry out public relations policies and programs in ICT Facilities.

Code: UC_1-9912-11_3

Level: 3

Occupations / Related jobs:

ICT facilitator
e-facilitator
ICT facility manager

Professional performance and performance criteria:

PP1 To promote an ICT facility as an institution and promote its social function in the community where it is located as well as its teams and staff members.

PC1.1 Presentation and information protocol is drawn up to guarantee understanding between all other stakeholders in the structure, the ICT facility's aims, and the figure and functions of the facility's promoter.

PC1.2 Control and management of materials and communication spaces are performed in agreement with all parties involved, ensuring the replacement of materials and facilitating the update of information.

PC1.3 The information to be conveyed on a general level is designed through use of both formal and informal communication channels, such as radio, television, brochures, billboards, social networks and the Internet.

PC1.4 The amount of participation in activities is analyzed to detect their level of dissemination, the methods employed and the message's comprehension.

PC1.5 The impact of dissemination and promotion is assessed while it is in progress, measuring how many people are receiving information, and subsequently by measuring participation in activities.

PC1.6 Data collection instruments are selected according to their relevance and ability to collect the information needed to evaluate the success of promotional activities.

PP2 To develop and publish material for the dissemination of ICT Facilities and their activities through different platforms and media.

PC2.1 The selection of the information to be conveyed is determined by the type of message and its potential recipients.

PC2.2 The information to be conveyed is written clearly and concisely and following the style agreed upon by the organisation, should one exist.

PC2.3 Advertising support materials are reviewed prior to publication.

PC2.4 Spaces where information is placed such as notices, billboards, informational brochures, the Internet or social networks are identified to enable assessment of their management.

PC2.5 Information distribution procedures are outlined in accordance with their design.

PP3 To define and participate in social networks and collaborative work with organisations, services and people in their own environment.

PC3.1 Both online and traditional channels of communication are used to facilitate continuity in two-way relations between the ICT area facilitator and other network members.

PC3.2 Network members' information and knowledge are systematized in a database in accordance with criteria of reliability and ease of upgrade.

PC3.3 Meetings and new encounters are coordinated by facilitating interested parties' attendance at face-to-face events taking into account the availability of potential participants' time of and accessibility to spaces.

PC3.4 The meetings and/or events are planned in accordance with their purpose, transmitting the image of the organisation and its culture.

PC3.5 The meetings or corporate events of the ICT facility or relationship networks are organized according to the rules and protocol-required above, prior to, during and afterwards whilst confirming attendance in good time.

PC3.6 The necessary logistics for the meeting and/or event are foreseen, prepared and verified -documentation, audiovisual media, catering, and others- minimizing possible contingencies, following safety standards and confidentiality in line with the nature of the event.

PC3.7 The results of the organisation of meetings and events are measured taking into account the objectives set previously, using where appropriate, satisfaction questionnaires.

PC3.8 The information generated in various meetings is systematized to ensure its dissemination among all parties concerned.

Emotional Skills

Proactivity

- Influences and enlivens his/her surroundings.

Orientation toward service

- Accepts the viewpoint of internal or external users.

Interpersonal communication

- Grasps information effectively even in the case of complex situations and messages.

Understanding of the organisation

- Foresees the way in which new events or situations will affect individuals and groups in the organisation.

Flexibility

- Catalyses change, manages and motivates others to change.

Cognitive Skills

Verbal Reasoning

- Knows how to communicate effectively to coordinate operations among various team members.

Conceptual Reasoning

- Is able to identify key issues and problems in situations that are not obvious to others and have not been learned (either through experience or education).

Systemic Thinking

- Understands the effects that occur in the environment which affect both his/her work and that of others.

Professional context

Means of production

Brochures, posters, advertisements on websites and other media.
Web portals and websites about the use of networks.
Specific software for editing.

Products and results of work

Catalogue of activities.
ICT Facility visible from its surroundings.
Collaborative work with networking/stakeholders in the environment.

Information used or generated

ICT facility action plan and project.
Joint network action plan.
Protocol for presentation of ICT Facilities.

Competence unit 4: To manage communication both with and among users in the day-to-day running of ICT Facilities.

Code: UC_1-9913-11_3

Level: 3

Occupations / Related jobs:

ICT facilitator
e-facilitator
ICT facility manager

Professional performance and performance criteria:

PP1 To attend users and organisations in person or online, registering and managing their enrolment.

PC1.1 In-person service to users and organisations follows service protocol and takes place in welcome areas.

PC1.2 Online service is programmed in a predetermined response time using pre-established tools.

PC1.3 Service for the disabled or users with special needs is given taking into account their characteristics.

PC1.4 Enrolment forms are completed using the standard forms for this purpose and information is entered in the user database.

PC1.5 The activities intended for groups from organisations in the catchment area are designed in conjunction with those in charge of them and are scheduled at times that do not interfere with the normal activities of the ICT Facilities.

PP2 To inform users and organisations about facilities, activities and available resources.

PC2.1 The learning that can be achieved, activities that can be carried out and the resources available are communicated to users so that they can adjust any options that ICT offers space to their needs.

PC2.2 Schedules, information and features of the different activities are planned and communicated in a clear and understandable way so that people can choose the options that interest them most.

PC2.3 The possibility of using available resources is communicated regularly to organisations in the surrounding area to facilitate the design of specific activities for particular groups of users.

PP3 To facilitate access to technology infrastructure, computer applications and Internet connectivity.

PC3.1 Computer hardware, peripherals, applications and Internet access are available to ICT facility users in accordance with the timetables and in the conditions established for this purpose.

PC3.2 Unscheduled access to computer equipment by persons other than users of the ICT Facilities will be provided when they do not interfere with scheduled activities and following the protocols established for this purpose.

PC3.3 When access to certain facilities or applications, and Internet connectivity involves the payment of a fee, this will be approved by the relevant decision-making body and will be communicated prior to use to the party involved.

PP4 To promote empowerment and positive use of ICT, especially social and work aspects.

PC4.1 Training in the use of various tools and equipment is planned to be done gradually and with assistance, thereby ensuring complete adaptation to the environment.

PC4.2 Assistance and advice procedures are organized to ensure their maximum availability when required.

PC4.3 Advice on the use of ICT takes into account users' working, learning, social and communication needs.

PC4.4 Advice on the use of ICT takes into account the different types of hardware, peripherals and software on the market, as well as their features, use and price.

PP5 To foster user participation in activities and collaborative work.

PC5.1. Activities are designed using methods that promote active participation.

PC5.2 Doing learning exercises requires collaborative work.

PC5.3 ICT activity support duties and attention to people with special needs are assigned to volunteers.

PC5.4 The relation between facilitator and users encourages collaboration in the use of ICT.

PC5.5 The facilitator's behaviour fosters use of social and relational networks.

PC5.6 The facilitator's behaviour fosters communication and relationship among people in ICT Facilities.

Emotional Skills

Interpersonal communication

- Grasps information effectively even in the case of complex situations and messages.

Orientation toward service

- Accepts the viewpoint of internal or external users.

Empathy

- Interested in knowing other people's opinions to help them reach their goals more effectively.

Negotiation

- Evaluates the effects of any decisions taken.

Cognitive Skills

Verbal Reasoning

- Has the necessary linguistic resources to express complex and abstract ideas and can express them in different ways.

Synthetic reasoning

- Brings together ideas and relates them to each other to design new action plans.

Abstract Reasoning

- Understands the principles of non-verbal sorting of items that change in relation to a number of variables.

Conceptual reasoning

- Is able to identify key issues and problems in situations that are not obvious to others and have not been learned (either through experience or education).

Professional Context:

Means of production

Facilities, welcome areas and customer service.

Products and results of work

Registration forms and information.

Users knowledgeable about ICT space activities.

End users proficient in the use of ICT with both social and work functions.

Users connected to social networks.

Information used or generated

Protocol for presentation of ICT Facilities.

Criteria for acceptance.

Catalogue and activity plan.

Rules of operation of the ICT Facilities.

Competence unit 5: To carry out ICT facility activity independently or in teams.

Code: UC_1-9914-11_3

Occupations / Related jobs:

ICT facilitator
e-facilitator
ICT facility manager

Professional performance and performance criteria:

PP1 To design periodically the activity of the ICT Facilities, the use of resources and the timing of implementation.

PC1.1 Activity programme elements in ICT Facilities are identified and defined to predict the overall activity and are reviewed periodically to ensure any necessary adjustment or correction.

PC1.2 The objectives are written with precision, depending on the skills to be acquired in order to guide the training.

PC1.3 The activities are selected and designed based on the needs expressed by the ICT space user group, taking into account the identified needs of users and potential outcomes of the evaluation of the activities already undertaken.

PC1.4 Activity design and the implementation schedule take into account the availability of human and material resources to ensure their proper functioning.

PC1.5 Activity planning in ICT Facilities facilitates maximum use of the material resources available and the most efficient performance of the team.

PP2 To stimulate activity in ICT Facilities and use of space and resources.

PC2.1 The various planned activities, which may be scheduled, regular or occasional, are presented to ICT facility users, providing guidance in accordance with their needs and interests.

PC2.2 Suggestions and requests are systematically collected and analyzed in order to respond to proposals whenever possible.

PC2.3 Different scheduled activities are recommended to users depending on their needs, specifying the objectives to be achieved on completion of each one.

PP3 To evaluate ICT facility activity, compiling records and reports for hierarchical superiors, network and/or financial backers or sponsors.

PC3.1 The procedure for assessing ICT facility activity is established taking into account its features and aims, with the participation of all users and the promotion team.

PC3.2 Both qualitative and quantitative data, for the evaluation and improvement of the activity is obtained through the use of data collection instruments (questionnaires, surveys, record sheets, etc) reflecting the quality of activities and whether they suit the objectives, target audience, resources and the ICT facility.



PC3.3 The records and reports are presented following the guidelines of the persons and/or entities to which they are to be presented (hierarchical superiors, financial backers and so on) and in formats that facilitate comparison of the indicators over time.
PC3.4 The records include at least both quantitative and qualitative analysis of activities as well as proposals for improvement.

PP4 To identify, propose and implement innovation and new business opportunities for the ICT facility.

PC4.1 Evaluation of various activities includes possible innovation or improvements that may be applied and the feasibility of carrying them out.
PC4.2 ICT facility activity planning takes into account the emergence of new operating systems and programmes and new versions of existing ones.
PC4.3 ICT facility activity planning takes into account the emergence of new types of hardware and new uses.
PC4.4 Best practices learned at network meetings are analyzed and, if necessary, adapted to be applied to other areas of ICT.

Emotional Skills

Initiative

- Foresees events.

Understanding of the organisation

- Foresees the way in which new events or situations will affect individuals and groups in the organisation.

Self-confidence

- Feels confident when working with little supervision and guidance.

Self-regulation

- His/her level of self-commitment is consistent with the decisions and responsibilities taken.

Orientation toward service

- Accepts the viewpoint of both internal and external users

Innovation

- Keeps up to date on the latest trends and innovation.

Cognitive Skills

Verbal Reasoning

- Possesses the necessary linguistic resources to express complex and abstract ideas and can express them in different ways.

Synthetic Reasoning

- Brings together ideas and relates them to each other to design new action plans

Conceptual Reasoning

- Identifies key points of a complex situation in the course of his/her duties.

Professional Context:

Means of production

Means of design, planning and project management.
Subscription to news channels and social networks.

Products and work outcomes

Programme of activities.

Records and evaluation reports.

Reports of activities.

Proposals for new activities and improvement of existing ones.

Information used or generated

Inventory of resources.

Evaluation records.

Competence unit 6: To train internal and external users of ICT Facilities.

Code: UC_1-9915-11_3

Level: 3

Occupations / Related jobs:

ICT facilitator

e-facilitator

ICT facility manager

Professional performance and performance criteria:

PP1 To design appropriate training activities for different types of ICT space users.

PC1.1 The theoretical and practical contents are developed, structured and sequenced in meaningful and pedagogically sound work units, which are all-encompassing and flexible in accordance with the planned objectives and skills to be developed in the training, and using up-to-date sources of information, programmes and tools.

PC1.2 Learning activities are designed and structured in accordance with aims, content, time and participants' characteristics to facilitate their learning process.

PC1.3 Methodological strategies and teaching resources for learning facilitators are selected in accordance with objectives, content and training methods, adapting them to the capabilities and needs of the target audience.

PC1.4 Timing of the teaching units is set by course content and linking them to performance criteria.

PC1.5 Course content and learning activities as well as necessary resources, are sequenced according to pedagogical criteria that ensure the fulfilment of its aims.

PC1.6 Course content and learning activities are set out in the teaching guide coherently, as are teaching strategies and methodologies used in teaching resources, ensuring the fulfilment of aims.

PP2 To prepare learning materials and the area where the activity takes place.

PC2.1 Identification and selection of teaching materials and resources is set according to the characteristics of the training and the people they were intended for.

PC2.2 The material used is set out in a list, specifying its features and quantities needed for the course.

PC2.3 The educational material preparation guide is written in accordance with pedagogical criteria and technical features of support material.

PC2.4 Course materials are prepared or adapted to participants' objectives, content, environmental conditions and characteristics.

PC2.5 Pedagogical means and resources are used according to technical specifications, educational guidelines and planning to obtain maximum benefit.

PC2.6 Operation of means and resources is checked prior to use to ensure its ability to function during the course.

PP3 To carry out educational activities with ICT space users.

PC3.1 The programme's different parts are explained to participants with an emphasis on the importance of the work to be done, thereby providing an overview of the whole course.



PC3.2 Participants' needs, interests and prior knowledge are considered and linked to course content at the beginning of the training process to adapt to the context in which training is imparted.

PC3.3 Teaching strategies are applied and modified in accordance with participants' needs and learning pace, bearing in mind individual or group difficulties.

PC3.4 Learning activities are set out clearly with instructions and well-defined performance criteria, providing information on the type of expected outcomes and the criteria to be used for evaluation.

PP4 To assess the learning outcomes of participants in activities and training courses.

PC4.1 Participants' level is measured on commencement of training courses and compared against aims to be able to adapt course content to test results.

PC4.2 Content delivery indicators are checked systematically, with special emphasis on participants with special needs.

PC4.3 Data collection tools are conceived and applied in accordance with relevant data collection regulations.

PC4.4 Learning assessment takes place throughout the training process with objective realistic and flexible criteria, comparing the level of learning outcomes to those expected in the learning programme.

PC4.5 Self-assessment tools enable participants to monitor their progress while allowing teaching staff to propose improvement strategies.

PC4.6 Assessment of learning outcomes is communicated to participants and guidance is provided about whether to continue or redirect their learning process.

Emotional Skills

Flexibility

- Catalyses change, manages and motivates others to change.

Learning

- Learns from both experienced and observed situations.

Orientation toward achievement

- Sets challenging goals taking controlled risks.

Open to change

- Enables others to view change as an opportunity to improve.

Empathy

- Interested in knowing the views of others to help them reach their goals more effectively.

Innovation

- Keeps up to date on the latest trends and innovation.

Cognitive Skills

Verbal Reasoning

- Has the necessary linguistic resources to express complex and abstract ideas and can express them in different ways.
- Can communicate effectively to coordinate operations among various team members.

Conceptual Reasoning

- Is able to identify key issues and problems in situations that are not obvious to others and have not been learned (either through experience or education).

Synthetic Reasoning

- Generates effective solutions from the union of different elements involved.

Professional context:

Means of production

Access devices: computers and peripherals (scanners, printers, cameras, etc.).

Hardware required: routers, wiring, cards, etc.

Software package required for activities, with an operating license.

Internet access.

Training materials.

Models of assessment of activities and participants' learning outcomes.

Products and results of work

Training materials adapted to the different activities registered participants' profiles.

Training activities carried out.

Assessment records.

Information used or generated

Assessment of learning outcomes.

Evaluation of activities undertaken.

Learning module 1: **Resources and the professional team in ICT Facilities.**

Level: 3

Code: MF_1-9910-1111_3

Duration: 90 hours

Related with CU: To manage financial resources and infrastructure and manage ICT facility teams.

Capacities/Learning outcomes and assessment criteria:

CLO1 Correctly identify, in accounting terms, information represented in the supporting documents of financial transactions related to commercial law and taxation.

AC1.1 Understand the concept and meaning of budget identifying its main features.

AC1.2 Identify the most common accounting documents, contracts for the purchase of products and services, receipts, invoices, and so on, examining each one's particularities.

AC1.3 Describe a procedure for recording and monitoring of these documents.

AC1.4 Describe the process of developing a schedule for receipts and payments, as well as the variables to consider.

AC1.5 Distinguish both conventional and electronic instruments and means of collection and payment, identifying the characteristics, and elements that make up the documentation.

AC1.6 Identify the main uses and benefits of specific computer applications used for the completion and recording of commercial documentation.

AC1.7 In a practical case in which properly described information is provided about the activity during a particular period of time:

- Fill in supporting commercial and administrative documentation of such operations whenever possible using appropriate computer applications.
- Filing all generated documentation in accordance with the established procedure.

AC1.8 Know applicable legal regulations in relation to the different means of collection and payment used in ICT Facilities.

CLO2 Identify potential funding sources and prepare proposals to access them.

AC2.1 Be acquainted with the different sources of funding available for activities to be carried out: grants, sponsorships, partnership agreements, etc.

AC2.2 Be acquainted with the most common types of documentation that are needed to access different types of funding: technical reports, budget tables, models of collaboration agreements, administrative documents, etc.

AC2.3 In a realistic practical case study:

- Choose the most appropriate funding source based on the characteristics of the proceedings to be undertaken.
- Check that it meets the requirements for award of the grant.
- Prepare proposals for access to certain types of funding and present them to decision-makers.
- Complete the necessary documentation to apply for access to financing: applications, presentations, reports, etc.

CLO3 Apply organisational techniques to determine human, material and technological development activities.

AC3.1 Describe the different types of organisational and functional structures that exist in ICT Facilities.

AC3.2 Identify the material and technological resources based on the mission and objectives of the service, describing its use for activity development .

AC3.3 Identify the functions, utilities and cost of the main computer applications, intended for both management support and specific activity of the ICT Facilities.

AC3.4 Identify the different roles of staff and main activities to be carried out according to the mission and goals defined in their professional profile.

AC3.5 Identify the factors or the most relevant critical areas to control, associating them with the indicators defined in a balanced scorecard

AC3.6 In a practical case study in which information about planned activities is correctly described:

- Record processes by identifying phases, activities and/or tasks that they comprise.
- Identify the different jobs and the professional profile required.
- Identify the necessary material resources depending on the size and activities.
- Make decisions about purchasing or renting furniture, hardware, software and consumables.
- Select basic indicators for monitoring the activity using a balanced scorecard and setting objective standards, based on information provided.

CLO4 Manage databases, in accordance with the aims of data collection and its use.

AC4.1 Learn the basic tools for data collection agents, users and professionals.

AC4.2 Describe the basic principles of selection, classification and archiving of information for the creation and operation of a database.

AC4.3 Understand how the most common software works in order to create and use databases.

AC4.4 In a properly characterised practical study:

- Decide the necessary information to be collected by stakeholders, users and professionals involved in the activity of ICT Facilities.
- Develop a database to collect, systematise and exploit this information and facilitate its use.
- Develop protocols for contacting the different stakeholders, users and practitioners involved in the activity of ICT centres, thereby facilitating fluent communication.

CLO 5 Write the rules of operation of the ICT facility to ensure access for all users to the available human and technological resources.

AC5.1 Identify the basic rules of operation common to the institution on which the ICT facility depends as well as any implications for measure to be taken.

AC5.2 Adapt these rules to a given ICT facility's features: mission, objectives, types of users, use of facilities technology and resources, anticipating the possibility of disciplinary proceedings for non-compliance.

AC5.3 Describe procedures and mechanisms for information and awareness of these standards according to the criteria of effective communication.

AC5.4 Justify the importance of proper use of different facilities and resources, explaining the consequences that may result from misuse or poor maintenance.

AC5.5 Set out responsibilities and fines resulting from the breach of the rules of operation bearing in mind the consequences of such breaches.

AC5.6 Design posters to announce internal rules.

Learning contents

Concepts

1. Financial administration of e-projects.

Knowledge of basic accounting.

- Budget preparation and execution.
- Resource management and distribution.
- Projects and proposals for submission to tenders or grant applications
- Monitoring of research and data sources.
- Justification for funding and preparation of operational reports for funders.

2. Planning ICT facility activity.

- Inventory of activity types.
- A regular activity schedule comprising financial, infrastructural and human resources at different levels.
- The activity plan and its relationship with the mission and project of an ICT facility and the organisation or institution that hosts it.

3. Recording ICT facility activity.

- A functional system for recording ICT facility users' activities.
- A system for gathering and keeping contacts from the functional relations of the ICT Facilities.
- A data usage system, for different uses.
- Basic concepts of data protection.

4. Rules of operation and access to ICT Facilities.

- List of rules of public access to the ICT facility.
- Guidelines to overcome access problems for the disabled to infrastructure, activities and facilities.
- Protocol for non-compliance with regulations.

Procedures

- Usage of tools for the collection and control of documents related to financial activity in ICT Facilities.
- Preparation of periodic financial reports.
- Data recording in a cash journal, arranging expenditure and receipts.
- Implementation of receipts and payments.
- Application of techniques for the preparation and control of documentation associated with obtaining resources.
- Drawing up charts for activity planning with different timescales (weekly, quarterly, and annual) stating the distribution of human and material resources available in the ICT facility.
- Articulation and use, with supporting software, of the daily activities record database of the ICT facility, paying special attention to both individual and institutional end users.
- Preparation and implementation of means of dissemination of ICT facility operational regulations and protocol.
- Coordinated usage of means and resources to improve accessibility (infrastructure, software or hardware) to ICT Facilities for people with different disabilities.

Attitudes

Problem solving

- Eliminates the cause of a problem to prevent it from recurring.

Organisation of work

- Is able to plan a wide range of resources to generate new managerial procedures.
- Can manage several projects simultaneously within the work area.

Teamwork

- Takes responsibility for the work of his/her team, including both success and failure.
- Collaborates and shares plans, information and resources.

Learning module 2: **Technological resources of ICT Facilities.**

Level: 3

Code: MF_1-9911-1111_3

Duration: 60 hours

Related with CU: To manage and maintain technological resources in ICT Facilities.

Capacities/Learning outcomes and assessment criteria:

CLO1 Implement operating system installation and set up processes to activate computer equipment functionality in accordance with previously received specifications.

AC1.1 Distinguish the elements of an operating system to identify the functions of each one of them, whilst bearing in mind their technical specifications.

AC1.2 Classify operating systems and versions used in computer equipment detailing their main features and differences, according to technical specifications.

AC1.3 Identify the phases involved in the installation operating systems by checking computers' requirements to ensure the feasibility of installation.

AC1.4 In, properly characterized practical cases, install operating systems on computers with the same features, in accordance with previously received specifications:

- Prepare one computer with a view to installing the operating system and appropriate software.
- Install and configure the operating system by following the instructions.
- Install the programmes listed in the specifications.
- Select the software tools to perform cloning of the equipment.
- Obtain images of the installed system for subsequent distribution.
- Use disc image handling tools to implement those obtained from multiple computers with the same features, thereby activating their functional resources.
- Perform start-up and shutdown to test installation.
- Documenting the work done.

AC1.5 Interpret related technical documents, in spite of being published in the foreign language most commonly used in the industry, using it to aid the installation of the operating system.

CLO2 Implement processes to install and set up and hardware, software and peripherals, depending on technical specifications.

AC2.1 Analyze and explain the fundamentals of the physical architecture of a computer system specifying the different parts that it comprises.

AC2.2 Detailed technical specifications and procedures for installation and configuration of hardware components of a computer system according to provided functional specifications

AC2.3 Distinguish and explain the types of physical devices and communication techniques possible between the different hardware components of a computer system, describing its main features and typology.



AC2.4 Describe and classify the different types of peripheral devices in relation to their purpose, while describing the various techniques used for them to communicate with each other and available input and output device drivers.

AC2.5 Recognize and describe the main settings of application software for the proper use of system resources.

AC2.6 In many practical cases of installation and setup of application software in a computer system:

- Install the application software thoroughly documenting the process, the incidents occurred and the parameters used.
- Setting the parameters of application software related to the use of system resources to minimize the impact on its performance of.
- Setting the parameters of the application software so that it complies with the specifications of the system security plan.
- Verify the operation of application software and devices that make up the system, ensuring the configuration of their drivers and the absence of conflict using the diagnostic software as necessary.
- Update the application software to ensure system and data integrity in accordance with the organisation's security plan.
- Record the application software settings, detailing the parameters used.
- Interpret the organisation's security plan properly with a view to implementing the measures specified in computer security regulations.

AC2.7 Describe the various hardware solutions available to ensure system recovery in the event of unforeseen situations, describing their main features and configurations.

CLO3 Install and set up the connection to the external network, taking into account established criteria of accessibility and security.

AC3.1 Identify interface parameters with the public network in accordance with the specifications of the service itself and the interface device.

AC3.2 Describe the procedures and tools used to implement device configurations to interface private networks with public networks, in order to support communication services.

AC3.3 In a properly characterised practical case, install a network interface device to support private and public communication services, in accordance with given specifications:

- Interpret technical equipment documentation to verify compliance with it before installation.
- Install and connect the modules required for adaptation using tools and following the instructions in the relevant technical documentation.
- Perform tests to verify the functionality of all installed devices.
- Record all activities in the equipment documentation.

AC3.4 Describe the incidents that occur to interfacing devices between private and public communication networks, should warnings be received from tools to that end or other means.

AC3.5 Describe the tools and techniques used to isolate and diagnose the causes of incidents with public and private network interfaces and to solve problems in accordance with established procedures and specifications.

CLO4 Install and set up local area network nodes as well as protocol management tools and other programmes that support communications services.

AC4.1 List the elements that can be found on the physical map of a local network based on its scope and network infrastructures used.



AC4.2 List and explain the features of protocols configured on a local network bearing in mind the technology and standards used.

AC4.3 Explain the node-link direction system used in the local network based on the network technology used.

AC4.4 In a case study of installation and configuration of network nodes in order to implement internal communication services, in accordance with specifications received:

- Interpret technical documentation identifying the elements that make up the installation.
- Identify the different network sockets for nodes and their representation in the control switch cabinet.
- Select the appropriate tools to perform the installation.
- Install network adapters along with their drivers.
- Install and configure network protocols to be used in accordance with specifications received.
- Install and configure the various network services in accordance with the specifications provided.
- Record activities.

AC4.5 Interpret the specifications of a particular configuration of communication protocols, taking into account the needs of node integration to the network and implementation of relevant services.

AC4.6 In a practical case, configure the different communication protocols in accordance with the technical specifications provided.

CLO5 Carry out processes of installation, configuration and update of software and services necessary for ICT Facilities.

AC5.1 List different types of computer attacks, means of forbidden access and how they can affect a computer.

AC5.2 Explain how to use tools used to prevent and repair damage caused by computer viruses, malware and other security threats (antivirus, firewall, etc.).

AC5.3 Describe the basic precautions that users should take in matters of security and prevention of infection by computer viruses, malware and other security threats.

AC5.4 In a practical case of installation or upgrade of an antivirus program:

- Install or update the protection system properly (antivirus, firewall, spam filter, etc.) following established procedure.
- Configure protection systems according to requirements.
- Update protection system versions with the latest available patterns.
- Recording the activities and results.

AC5.5 Describe the process of installation or update of a computer application.

AC5.6 In a properly characterized practical case, in which it is required to install or update a particular application on a computer:

- Install or update application components correctly, following the procedure set out by the manufacturer and/or specifications provided.
- Configure the application based on the characteristics and resources of the computer on which it is installed.
- Customize the application to handle different possible user settings.
- Configure the application, taking into account possible user disabilities, and using it with all its related features, operating system and hardware, which are installed for such a purpose.
- Configure directories used by the application to facilitate access to existing documentation, templates or other relevant information.



- Check the application's operation through systematic testing to ensure the proper functioning of installed components and access to both the shared network and the computer's resources.

AC5.7 In a properly characterised practical case study in which the installation procedure does not give the expected results:

- Consult the technical documentation to identify the problem and find its solution.
- Check the Internet (service pages, forums) to identify the problem and find a solution.
- To record the incident and the solution in a format established for this purpose.

CLO6 Diagnose and solve problems that arise in the operation of services and software.

AC6.1 List the most common performance problems and breakdowns of computer applications and associated symptoms and assign a possible solution for each one and its degree of urgency.

AC6.2 In a properly characterised practical case study in which there is a damaged computer and a description of the error:

- Reproduce the problem on the computer.
- Describe the computer breakdown incident clearly.
- Establish the probable cause (hardware, operating system, application, virus, mail, Internet access, etc.).
- Set the level of emergency repairs.
- Describe possible solutions to the problem.
- List the items needed for repair.
- List the activities planned for the repair.
- Estimate the time needed to repair the computer.

AC6.3 Implement established procedures for safeguarding information and retrieving it after repair.

AC6.4 In the event that the problem has been classified as decision made by software (operating system or application) or the incidence of a computer application system:

- Identify the cause of the decision with the help of assistants, aid programs, manuals and online consultation (FAQs, tutorials, forums).
- Identify and locate the items needed for repair (firmware, drivers, installation support, upgrade patches, licensing manuals, etc.) using the Internet if they are unavailable.
- Repair in accordance with appropriate procedures of reconfiguration, update or reinstallation of the computer application by following suitable procedures.
- Check that the computer malfunction has now been resolved.
- Record activities and outcomes.

AC6.5 In the event that the problem has been classified as infection by a virus, malware or other security threats:

- Check that the computer has an updated security system (if necessary consult the Internet), and otherwise, and if possible, install the latest version.
- Locate the infection by means of the security system.
- Eliminate security threats with appropriate tools, trying to save as much data as possible.
- Record activities and results.

AC6.6 Describe resetting procedures of the existing application system for user changes.

CLO7 Update a computer operating system to include new features and fix security problems, bearing in mind technical specifications.

AC7.1 Identify the software components in an operating system and adjust them to facilitate upgrades bearing in mind their technical specifications.

AC7.2 Identify and classify sources for updates to facilitate update processes in an operating system.

AC7.3 Describe the procedures for updating the operating system taking into account the security and integrity of information in the computer.

AC7.4 In properly characterised practical cases, update an operating system to incorporate new features, in accordance with the specifications provided:

- Identify the components to upgrade the operating system.
- Check the software update requirements.
- Update the specified components.
- Verify the processes and the absence of interference with other system components.
- Record the updating process.

AC7.5 Recognize updates of manuals and documents, recording changes made to systems and equipment, taking into account temporary identification.

Learning contents

Concepts

1. Installing the operating system.

- Most common and up to date operating systems in ICT Facilities.
- Augmentative tools to facilitate access for groups with functional or sensory diversity.

2. Installation of peripherals and hardware unique to an ICT facility.

- Installation of any peripheral unique to a particular ICT facility.
- Installation manual: provided with the material and online.

3. Setting up the Internet connection.

- Procedure for installation and Internet protection systems.
- Communication with suppliers.

4. Enabling ICT intranet facilities.

- Connection of the different work stations of an ICT facility, including phones.
- Sharing of common services, such as printers or scanners.

5. Installation and/or updating of services and programmes.

- Installation of the most frequently used or necessary applications and programmes for planned activities.
- Adaptation of applications and programs for use with groups with functional or sensory diversity.
- Management and configuration of the most frequently used or necessary services for planned activities.

6. Maintenance protocol for the operation of hardware.

- At work stations and peripherals.
- Recording of incidents and significant changes.

7. Review, update and maintenance protocol.

- Of essential software.
- Updated protection systems.
- Recording of changes, updates, settings, and access to services and programmes.

Procedures

- Complete installation of operating systems for workstations. Configuration of service accessibility. Managing profiles and permissions.
- Installation of peripherals such as printers, scanners, video cards and other accessories belonging to the ICT Facilities, configuring drivers.
- Connection of workstations to the Internet through any of the systems (wireless, cable etc.). Installation and configuration of security for Internet browsing (firewall, antivirus, and profile permissions).
- Enabling connection between different workstations in ICT Facilities so that they communicate with each other, forming an intranet to share peripherals and resources.
- Installation of applications and software specific to the ICT facility, following the instructions or seeking information about them and configuring them for use by users.
- Design and implementation of a protocol for periodic maintenance of ICT facility operation. Dealing with or solving technical problems with hardware, software and peripherals (the incidence should be solved by the e-facilitator or a third party through him/her).
- Implementation of guidelines for periodic maintenance to minimize incidents.
- Application of safety regulations.
- Maintenance of change logs, updates, settings and access to services and programmes.

Attitudes

Problem solving

- Eliminates the cause of a problem to prevent it from recurring.

Learning

- Learns from both experienced and observed situations.

Interpersonal relations

- Accepts the viewpoint of both internal and external users.

Innovation

- Keeps up to date on the latest trends and innovation.

Learning module 3: **Activity schedule for the dissemination and promotion of ICT Facilities and communication with their catchment area.**

Level: 3

Code: MF_1-9912-1111_3

Duration: 90 hours

Related with CU: To define and implement public relations policies and programmes in ICT Facilities.

Capacities/Learning outcomes and assessment criteria:

CLO1 Identify stakeholders in the community and gather data for their information.

AC1.1 Identify stakeholders in the community, their scope of action and representatives.

AC1.2 In a properly characterised practical case in which a data base of stakeholders is set up and maintained:

- Establish criteria for selection of stakeholders that form part of the database.
- Decide the data to be collected.
- Design the database.

AC1.3 Describe the type of service or collaboration that ICT Facilities can provide in terms of the characteristics and needs of each agent.

CLO2 Inform the different stakeholders in the community about the ICT facility's objectives and planned activities.

AC2.1 Define a protocol for dissemination and transmission of information, bearing in mind the mission and goals of ICT Facilities.

AC2.2 In a properly characterised practical case, whose aim is to disseminate the objectives and activities of the ICT Facility:

- Select the target audience.
- Select the message to be conveyed.
- Draw up an explanatory leaflet, a presentation or a news item taking into account the services that the different stakeholders in the area can expect of us.
- Establish the means of dissemination.
- Develop tools to gather information on the impact achieved.

AC2.3 Identify the main community leaders in the catchment area and establish regular contacts with them to disseminate activities.

CLO3 Disseminate information intended for and adapted to the target audience.

AC3.1 Describe the most appropriate materials and means to provide potential end users with different types of information in a clear way which is adapted to their needs.

AC3.2 In a properly characterized practical case, whose aim is to disseminate an activity programme:

- Write briefing notes explaining the characteristics of different activities using appropriate technical vocabulary for entry-level participants in each activity.

- Design notices (for example, schedule charts including all the activities in ICT Facilities, convening of meetings, etc.) and decide on their best location.
- Write the script for information sessions open to anyone interested.
- Propose and describe, if appropriate, other means of information dissemination.
- Develop tools to gather information on the impact achieved.

AC3.3 Maintain a constant presence on the Internet and social networks to announce information and activities as well as attracting new users.

CLO 4 Describe the techniques and skills that facilitate communication between the staff and the facility's catchment area.

AC4.1 Determine the parameters for gathering and recording information about staff and stakeholders' interests.

AC4.2 Describe the communication mechanisms to be established among staff and between them and the facility's catchment area.

AC4.3 Prepare and disseminate the necessary protocols for use of meeting facilities (physical and/or virtual), including their functioning and infrastructure.

AC4.4 Set up levels and areas of participation in the various networks involved in ICT Facilities.

AC4.5 Describe the features of the relationship between ICT Facilities and one or more networks.

CLO 5 Establish contact and coordination mechanisms with community leaders and members of networks and organisations in the catchment area.

AC 5.1 Design strategies to promote the establishment of partnerships and agreements with the various stakeholders in the community, bearing in mind the mission and objectives of the ICT Facilities.

AC 5.2 Design strategies to promote the establishment of partnerships and agreements with the main professional networks taking into account the specificities of the centre itself.

AC5.3 Differentiate types of meetings according to their nature.

AC5.4 Distinguish the different rules of protocol in the organisation of meetings, activities and events.

AC5.5 Describe the stages of an event, designing an appropriate project, in accordance with defined guidelines.

AC5.6 In a properly characterized case study with a simulated meeting, providing the necessary resources and issues to be discussed:

- Write the announcement for the meeting and specify its means of dissemination.
- Draw up the session's welcome speech and presentation.
- Analyze the meeting's outcome, if necessary using statistical methods and control indicators.
- Write up a report on the meeting.

Learning contents

Concepts

1. Networking.

- Organisation of relational and community space in ICT Facilities.
- Networks for people and organisations: what they are and how they are articulated.

- Methods for knitting networks , reasons and strategies together.

2. ICT Facilities' relational scope and their community.

- Knowledge of the ICT Facilities' scope.
- Methodologies for the revitalisation of small communities.
- Mechanisms for participation.
- Motivation and fostering of participation.

3. Material presentation and dissemination of ICT Facilities' activities in a given area.

- Development of physical and classroom based materials to support activities and strategies in ICT Facilities' catchment area.
- Tools and applications that support networking.

4. Participation in professional and relational networks.

- The meaning of networking.
- Reasons for incorporating network culture in ICT Facilities.
- How is a network built and promoted?
- Knowledge of social movements.

5. Dynamics of participation in professional and relational networks.

- Elements and tasks to participate in a network.
- Managing a network.
- Tools for managing an online social network or virtual community.
- Mechanisms and levels of participation.

Procedures

- Application of techniques for designing strategies and materials for the presentation of ICT Facilities.
- Establishment and planning of stable and regular relationship dynamics.
- Use of items and tools for evaluating the relational network in ICT Facilities.
- Design and development of physical and virtual materials.
- Collaborative work and knowledge sharing activities.

Attitudes

Interpersonal relations

- Influences and enlivens his/her surroundings.
- Assumes the viewpoint of users and both internal and external customers.
- Gathers information effectively even in situations and complex messages.

Organisation of work

- Foresees the way in which new events or situations will affect individuals and groups in the organisation.

Problem solving

- Catalyses change, manages and motivates others to change.

Learning module 4: **Communication and procedure in ICT Facilities.**

Level: 3

Code: MF_1-9913-1111_3

Duration: 120 hours

Related with CU: To manage communication both with and among users in the day-to-day running of ICT Facilities.

Capacities/Learning outcomes and assessment criteria:

CLO1 Design and implement protocols for information, registration and welcoming new users.

AC1.1 Identify different protocols for information, registration and welcoming new users who use other ICT Facilities in the surrounding area.

AC1.2 Identify a potential ICT facility user's specific characteristics and those of their surroundings, especially those that may influence the design of a specific protocol: level of reading comprehension, need for ICT in their daily life (communication, job search, leisure, etc.).

AC1.3 Design protocols which are coherent with habitual protocol models in the surrounding area and on the same network, but bearing in mind the particularities detected.

CLO2 Analyze procedures and media used for the social projection of ICT Facilities.

AC2.1 Identify communication resources to ensure a great impact on the population.

AC2.2 Choose procedures and most appropriate media to reach potential public users, with particular emphasis on communication with:

- People over 65.
- Children and young people.
- People with disabilities.
- Immigrants.
- Women in situations of exclusion for reasons of gender.
- People who need to make computer literacy part of their job search process.

AC2.3 Analyse the specific characteristics and needs of such groups to develop a different discourse for each one.

CLO3 Define access criteria to amenities and services within ICT Facilities.

AC3.1 Identify users' needs for access to technological infrastructure, applications and Internet connectivity, bearing in mind their learning activities.

AC3.2 Identify the availability of access to these resources, taking into account:

- Peak use times.
- Most frequently requested by user type and time.
- Expenditure associated with the use of this resource, if any.

AC3.3 Identify different protocols for accessing these resources, which are used in other ICT Facilities in the area or on the same network.



AC3.4 Design protocols that are coherent with habitual protocol models in the surrounding area and on the same network, but bearing in mind any particularities detected at the ICT Facility.

AC3.5 Incorporate functional diversity through the use of existing tools and methods in ICT Facilities.

CLO4 Know and apply techniques to foster social empowerment in ICT, so that through information, training and access to infrastructural resources, people are self-managed and are able to take decisions about the use they wish to make of ICT, overcoming stigmata and facilitating social insertion.

AC4.1 Know the negative implications a lack of resources and technological skills has on one's chances of finding work.

AC4.2 Explain the possibilities of social and within-family communication offered by ICT: email, videoconferencing, chat, etc.

AC4.3 Explain the range of resources to support a job search offered by ICT: online CV, Internet job boards, job websites, social networking, video-CV, etc.

AC4.4 Design communication strategies in order to publicise the potential of ICT to facilitate social and within-family communication as well as job searches.

AC4.5 Provide tools and training to facilitate autonomous interaction with ICT.

CLO5 Describe and apply group motivation techniques and activities taking into account participants' needs.

AC5.1 Recognize the aspects to consider with respect to the target group and the learning environment, with a view to developing understandable and motivating explanation of activities.

AC5.2 Select observation techniques to determine the general characteristics of participating groups and individuals.

AC5.3 Prepare proposals for activities which promote creativity within the group.

AC5.4 Describe mediation models and techniques in conflict management.

AC5.5 In a case study in which group members following a particular learning unit are described, some of whom have special needs such as reduced mobility, impaired vision or language comprehension:

- Identify resources and techniques with which to stimulate communication, cohesion and integration of the different group members.
- Propose alternative activities, appropriate adaptation and assistive technology to compensate for the aforementioned special needs.

AC5.6 Use tools that facilitate communication, participation and collaborative work by users in activities.

AC5.7 Identify and schedule tasks to support ICT facility activity and assist people with special needs, all of which is to be carried out by volunteers with a view to increasing their importance.

Learning contents

Concepts

1. The value of ICT as a tool for social inclusion and employment.

- ICT and access to the labour market: the skills most in demand.
- ICT tools for job searches: online CVs, Internet job boards, job websites, social networks, professional networks and video CVs, etc.

- Possibilities of social and family communication through ICT: e-mail, videoconferencing, chat, etc.

2. Promotion of ICT Facilities.

- Development of protocols for access and use of resources: criteria.
- Strategies for the motivation of groups and activities.
- Conflict resolution techniques.
- Strategies for a positive approach to diversity (functional, cultural, age related, etc.).

Procedures

- Implementation of protocol and techniques for organizing registration records so that they can be used by activity organisers.
- Design of advertising materials.
- Use of tools and methods in ICT Facilities for the incorporation of users with functional diversity.
- Proposed tools and training to enable autonomous interaction with ICT.
- Organisation of facilities and activities which foster cooperation and mutual assistance in the context of learning and empowerment, with respect to participants' use of ICT tools.

Attitudes

Interpersonal relationships:

- Grasps information effectively even in the case of complex situations and messages.
- Assumes the viewpoint of users and both internal and external customers.
- Interested in knowing other people's opinions to help them reach their goals more effectively.

Responsibility:

- Evaluates the effects of any decisions taken.

Learning module 5: **Planning, scheduling and execution of activities.**

Level: 3

Code: MF_1-9914-1111_3

Duration: 120 hours

Related with CU: To carry out ICT facility activity independently or in teams.

Capacities/Learning outcomes and assessment criteria:

CLO1 Recognize and use elements of ICT facility activity planning.

AC1.1 Describe the group's social cultural and economic variables as well as its educational needs and those of its catchment area, whilst influencing motivation activities and projects in ICT Facilities and in computer skill learning settings.

AC1.2 In a practical case of planning an ICT facility in a particular area, define the centre's basic approach and its short, medium and long term aims.

AC1.3 Distribute different scheduled learning units coherently in order to monitor participants' individual learning pathways.

AC1.4 Plan several computer literacy workshops throughout the course to facilitate the entry of new users at different times of the year.

AC1.5 Check that ICT Facilities have or can have all the necessary resources to impart the different scheduled learning units.

CLO2 Schedule activities taking into account the interests of users and the availability of resources.

AC2.1 Prepare a monthly activity calendar taking into account all the learning units to be imparted in this period.

AC2.2 Foresee needs with respect to technical, human and spatial resources for each activity and adjust the programme depending on their availability.

AC2.3 In a practical case for the gathering of suggestions:

- Set up procedures for the receipt of proposals from the target audience.
- Assess their suitability together with their inclusion in the course programme.

AC2.4 In a case study to draw up a learning unit, define an alternative activity consistent with the aims of a programme in which a planned activity cannot be carried out.

AC2.5 Include practical activities applicable to daily life, transversally across different learning units, such as online purchases and contact with state institutions.

CLO3 Use different techniques to stimulate communication and to promote the participation of users in ICT facility activity.

AC3.1 Identify strategies and teaching methods that encourage participation and cooperation in the activities planned.

AC3.2 In a case study to develop a previously determined learning unit for a properly described group:

- Identify the most appropriate strategies to encourage participation and cooperation.
- Select them according to their suitability for various activities.
- Discuss their application.

AC3.3 Recognize all components of the communication process.

AC3.4 Clearly explain the factors that determine the effectiveness of communication in the teaching-learning process.

AC3.5 Use communication principles in teaching-learning situations.

AC3.6 Use nonverbal communication techniques.

CLO4 Recognize and use assessment elements and instruments in ICT facility activity.

AC4.1 Describe participative and ongoing assessment procedures of general activity in ICT Facilities bearing in mind:

- The suitability of planning and programming for the needs and interests of users.
- The suitability of resources available to carry out activities.
- User satisfaction.
- Fulfilment of learning objectives on the part of users.

AC4.2 Draw up evaluation sheet guidelines which cover suggestions for improving ICT facility activities.

AC4.3 Prepare the outline of a final report about a learning unit, containing usable information for the improvement of future activity.

AC4.4 In a case study to evaluate a learning unit:

- Review the procedures used in monitoring the unit's implementation.
- Verify the development of group evaluation.
- Evaluate the report by use of related improvement strategies.

CLO5 To decide whether to design new activities or to redefine existing ones to adapt ICT facility policy to the evolution of the technological and social context.

AC5.1 Recognize the key drivers of change with respect to ICT.

AC5.2 Understand the changing needs for computing knowledge in the workplace.

AC5.3 Know the main factors involved in training quality.

AC5.4 Understand new interests and needs expressed by users in the evaluation of different activities.

AC5.5 In a properly characterised case study with an established programme and with a view to evaluating activities already carried out:

- Justify the appropriateness of changes to the programme.
- If necessary, propose the inclusion of new activities and/or eliminate some of those already scheduled.

Learning contents

Concepts

1. Description of the ICT facility project.

- Elements of activity planning activities in ICT Facilities.
- Short and long-term planning and calendar.
- Projects, records, evaluations and reports.
- Methods of assessment and determination of indicators.

2. Specific projects aimed at obtaining funding for ICT Facilities.

3. Promotion of ICT Facilities.

- Promotion and communication techniques to promote participation.
- Innovation in new activities and updating existing ones.

Procedures

- Preparation of ICT facility annual projects, bringing together infrastructural, human and financial availability with the centre's mission. Specific projects aimed at securing funding for the ICT facility.
- Programming by units of time (quarterly, monthly).
- Development of functional plans for the organisation and distribution of resources and activities.
- Organisation and management of equipment and facilities.
- Application of participation techniques and methods for groups and organisations as defined in the ICT facility project.
- Activity management.
- Application of activity evaluation methods.
- Use of tools to for the justification of financial assistance.
- Preparation of reports outlining outcomes at different required levels: the ICT facility in general, reports and supporting records. Delivery of results to managers and sponsors of ICT Facilities.
- Proposal for new ways of acting, new activities and new methods to improve and update ICT Facilities.

Attitudes

Problem solving

- Foresees events.

Organisation of work

- Foresees the way in which new events or situations will affect individuals and groups in the organisation.

Autonomy

- Feels confident when working with little supervision and guidance.

Responsibility

- His/her level of self-commitment is consistent with the decisions and responsibilities taken.

Interpersonal relations

- Accepts the viewpoint of internal or external users.

Innovation

- Keeps up to date on the latest trends and innovation.

Learning module 6: **Training in ICT Facilities.**

Level: 3

Code: MF_1-9915-1111_3

Duration: 120 hours

Related with UC: To train internal and external users of ICT Facilities.

Capacities/Learning outcomes and assessment criteria:

CLO1 Schedule training and organise content and activities.

AC1.1 Determine the environmental features and conditions of training sessions during learning unit preparation.

AC1.2 In a practical case to prepare training sessions related to pedagogical programming of a training activity:

- Write the lesson plan for a training session, which corresponds to a specific training activity, based on the educational programme.
- Distribute the content and learning activities based on the duration and timetable of a training activity in a consistent manner, to ensure the fulfilment of objectives.
- Organise course content into teaching units, in accordance with a timescale.

AC1.3 In a case study aimed at designing a specific training activity:

- Select training course content associated with expected learning outcomes, taking as reference the standard associated with the use of the training content.
- Prepare the training course content related to learning outcomes.
- Sequence the training content in accordance with established pedagogical criteria for skills development.
- Schedule activities that facilitate the assimilation and practice of learning content.
- Establish procedures for systematic review of compliance with the established planning time in order to make any necessary adjustments.

CLO2 Draw up a learning unit's pedagogical programme whilst differentiating its constituent elements.

AC2.1 Describe methodological strategies and resources which facilitate the development of a training activity, taking into account its different elements.

AC2.2 In a practical case aimed at developing a learning unit's course programme, taking into account participants' characteristics:

- Write the aims of the process.
- Apply development and completion regulations for the fulfilment of objectives.
- Sequence the progressive fulfilment of objectives.

AC2.3 In a case study aimed at designing a specific training activity:

- Select and establish learning strategies (learning activities, methodological techniques, pedagogical means, etc.), considering the target audience, content, timing, and so on.
- Compile a list of resources, tools, hardware, software and peripherals required for the training.

CLO3 Apply criteria for selection of learning materials and resources based on teaching activities.

AC3.1 Recognize pedagogical material means and resources whilst differentiating their technical and methodological features.

AC3.2 List materials, means and resources used during the training.

AC3.3 In a case study aimed at selecting materials for a scheduled training activity:

- Analyze the facility's conditions and resources.
- Bear in mind course participants' characteristics.
- Select appropriate materials, media and resources for the course.

CLO4 Develop training materials that promote the acquisition of knowledge and skills.

AC4.1 Identify the educational possibilities of different material and resources based on their use and their technical and pedagogical features.

AC4.2 Select meaningful sources and resources to develop graphic materials, whilst respecting current copyright legislation.

AC4.3 In a case study aimed at developing learning materials, use criteria specific to the technical and educational development of each resource.

AC4.4 In a practical study aimed at imparting a particular lesson:

- Write a lesson plan bearing in mind the pedagogical criteria, graphic design and technical features of the resources and means to be used.
- Develop and adapt materials applicable to different situations, whilst adapting educational material to course participants, outcomes, content and environmental conditions.
- Review course materials prior to use in accordance with the technical state and educational use of each resource and means.

CLO5 Analyse and establish methodological strategies that promote the acquisition of ICT skills.

AC5.1 Describe the main techniques and teaching methods that can be applied to ICT-related training.

AC5.2 Describe the techniques and strategies to establish learning objectives for different user groups: children, young people, the elderly, job seekers, etc.

AC5.3 In a properly characterized practical case, select the most appropriate methodological strategies for the objectives and characteristics of a given group.

CLO6 Decide on instruments to monitor participants' learning process during training, providing customized support strategies when necessary.

AC6.1 List learning triggers based on conditions in different situations.

AC6.2 Select individualised learning strategies that help each participant on the training program to acquire professional skills.

AC6.3 In a practical case to study the supervision of the learning process on a training programme, prepare a learning activity and tutorial schedule tailored to participants' needs whilst fostering their independence and responsibility.

AC6.4 Publicise the tutorial system for course participants, while reaching a consensus on their frequency and procedure for exchanges.

CLO7 Develop criteria and evaluation indicators to determine the level of learning and empowerment achieved by course participants and provide information about the training process.

AC7.1 Identify clear, precise, and suitable indicators for objective assessment of the adequacy and appropriateness of the training, in order to adjust it if necessary.

AC7.2 Follow learning assessment tools' instructions accurately and thoroughly.

AC7.3 Evaluate the level of aptitude achieved by course participants.

AC7.4 In a practical case study aimed at measuring learning outcomes:

- Check the level of achievement of objectives set out in the course programme.
- Propose decisions based on the course learning outcomes and make necessary changes, to the educational programme.

AC7.5 Check whether the contents are appropriate to achieve the expected level of competence.

AC7.6 Establish the elements of process, procedure and its purpose to enable them to be evaluated by adjusting the process.

Learning contents

Concepts

1. Design of training activities for ICT Facilities and preparation of spaces and resources.

- Selection and development of course content in accordance with the design of training and learning units and course participants. Elements of usability and functional diversity.
- Models of learning: constructivist and connectivist.
- Training Methodologies: Type. Advantages and disadvantages.

2. Development of training activities in ICT Facilities.

- Definition of strategies and teaching methods applied in the execution of the training.
- Definition of tailor-made criteria for the monitoring and motivation of participants.
- Organisation of motivating and stimulating learning environments.

3. Evaluation of learning and training activities in ICT Facilities.

- Definition and application of evaluation criteria and indicators for measuring achieved outcomes.
- Feedback and use of outcomes for new editions.

Procedures

- Design of both facility-based and online support activities, following basic programme guidelines (opportunity analysis and the target audience, defining goals and indicators, determination of contents and methodology of work and establishment of evaluation criteria of participants and activities).
- Design facility-based or online learning units, adapting them to the target audience in accordance with the course programme or activity that contains them.
- Selection of resources, materials, software and hardware.
- Research, evaluation and adaptation of existing training content to the criteria of the training to be imparted.
- Implementation of content for use in classroom or virtual environments.

- Development of new facility-based or online course content in accordance with guidelines for designing training programmes defined in the course or activity.
- Preparation of support materials and guidance.
- Definition and articulation of methodological strategies appropriate for the training, bearing in mind course aims and target audience.
- Definition of tailor-made action strategies in the context of an activity, with a view to adapting those methods to participants.
- Application of techniques and methods of evaluation on two levels: assessment of participants and evaluation of the activity (indicators).
- Establishment of systems for dissemination and use of lessons learned from evaluation to improve, update and innovate training.

Attitudes

Problem solving

- Catalyses change, manages and motivates others to change.

Autonomy

- Learns from both experienced and observed situations

Responsibility

- Sets challenging goals whilst taking controlled risks.

Interpersonal relations

- Motivates others to view change as a chance to improve.
- Is interested in knowing others' viewpoints to help them more effectively to reach their goals.

Innovation

- Keeps up to date on the latest trends and innovation.