



STUDENT GUIDE

GREENFOOD PROJECT

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Education and Culture
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Introduction

This small guide is geared to you, the student on this course. It has been designed and written to ensure your first contact with the e-learning platform course content is as enlightening as possible. It will explain what e-learning is, what it is a distance learning platform, and how the platform you are going to use for this course works.

We will begin with a little bit of history and theory on e-learning, presenting the characteristics, advantages and drawbacks of the same to the student in a clear and concise manner. We will then go on to explain what a distance learning platform is (which you have had to use in order to access this guide) and the main characteristics of the same.

A more detailed chapter will include a description of the GreenFood project platform through which you will take part in the course. We will explain the different features of the platform, which you will be able to use throughout the duration of the course.

We hope this guide helps you to learn a little more about the world of e-learning and the characteristics of this training methodology.

1. What is e-learning?

Before going on to present the different characteristics of e-learning we need to define the same. It is an English term describing a training modality. This type of training is conducted on the Internet. E-learning may therefore be defined as learning on the Internet.

Several different terms have been used to describe this mode of learning: Internet learning, distance learning, virtual learning, distance education, etc. They all refer to the training processes which use the network as information distribution technology, both the open (Internet) and closed (Intranet) networks.



There is a wide range of definitions on how e-learning is interpreted. One of them says that "it is a training process based on information and communication technologies where the physical presence of both teacher and student is not necessary, and the aim of which is to ensure a flexible (any time, any place) interactive (synchronous and asynchronous communication) learning process focused on the student (Martinez-Caro, 2008).

Important features of e-learning

Teaching
Use of information and communication technologies
Distance
Flexible and interactive learning process
The student at the center of the process



Two basic modes of e-learning may be defined:

- E-learning: when knowledge is distributed exclusively via the Internet.
- B-learning or blended-learning: a combination of classroom/distance learning.

A little bit of history

There have always been people wanting to learn, people curious about what is going on around them. And over time attempts have been made to overcome the problem of distance, of how to gain access to knowledge when this knowledge was far away from where the learner lived.

Many attempts have been made to solve these problems throughout History. After many attempts, distance education came to the fore, meaning all those wanting to expand their knowledge were able to do so, although they were not always near the different sources of knowledge. This led to the use of the different communication technologies used at different historic moments, (papyrus, the earlier books, the telephone, etc) and which have also been evolving over time.

The key moments of distance education may be defined as follows:

- The use of writing to give classroom lessons on papyrus and paper. Knowledge was within the reach of very few people.
- The invention of the printing press in the 15th century resulted in a greater number of people gaining access to texts. This made paper and books more popular and placed both knowledge and entertainment within the reach of many people.
- In the late 19th century, the industrialization of societies and the increased use of the printing press led to the development of education via correspondence.
- The cinema and radio were introduced in the 1940s and 1950s, and educational television in the 1960s.
- The written text began to gain support: audio cassettes, videos, slides, etc. In the 1980s the telephone began to be used as a means of speeding up tutorials.

- ❑ Education in the 1980s was based on personal computers and computer-assisted distance learning programs.
- ❑ The Internet was introduced to education in the late 1990s and gave way to e-learning.



Distance education grew steadily throughout the 20th century. It is geared mainly to those people which, due to their geographic location (living in rural areas for example); work conditions (no time to attend classroom); physical condition (handicaps); or personal decision, require education in accordance with their needs.

Distance or e-learning enables students to conduct educational activities on the Internet with no restrictions in relation to time or delivery location, and with the continuous support of specialized tutors. All with efficacy equal to or greater than traditional training and at a far lower cost per student trained.

A **specific characteristic of e-learning**: the learning process does not end with the course. You may continue to develop this learning using social networks, forums, other web pages, etc. **Communication plays a vital role** in this type of learning process.



The use of electronic resources greatly increases the appeal of this type of learning method to the student. Electronic mail to deliver exercises and communicate with the tutor, to forums where information may be posted and exchanged, as well as chat-rooms, audio conferences, video conferences, shared screens and whiteboards.

2. The main characteristics of e-learning

In order to understand how e-learning works and to take full advantage of the same, you need to be familiar with some of the most important characteristics, advantages and drawbacks too.

One of the simplest ways of understanding e-learning is to compare it to traditional classroom teaching. We have all experienced this type of educational method at some time or other: a teacher facing a group of students in a classroom, presenting the course content at a certain time and giving us an examination to prove we have understood and “digested” that knowledge.

In classroom teaching (regarded as traditional), the student is the **passive** element in the learning process.



Characteristics of traditional classroom training

Is based on a knowledge base to which the student must be adapted to

The teacher determines when and how the student is given the educational material

The student is given the knowledge in a passive manner to generate innovative, critical and investigative activities

Support is provided in the form of printed material and the teacher as an information provider

A linear model of communication is established between the student and the teacher

The learning process develops normally in groups

The learning process develops in a fixed timeframe and in specific classrooms

The time assigned to learning is normally scheduled

There is vast experience in the use of this modality

We possess a large amount of structural and organizational resources to put this type of learning process into motion

Source: based on Cabero et al. 2006

Opposite to this type of training is e-learning, considered to be a more modern method of education. Physically, teachers (tutors) and students are separated. This does not mean they are isolated from each other. Communication tools are

an extremely important feature of this type of training, as we will see later on when we describe the distance learning platforms.

Characteristics of web-based training

Enables students to have their own rhythm of learning

The concept of just-in-time-training is important

Different materials may be combined (aural, visual and audiovisual)

A single application can handle a large number of students

Knowledge is built up little by little and doesn't come defined

The time taken to train people tends to diminish

Tutor-student relations are interactive, as well as relations between students with contents

It tends to function on an individual basis, although group activities may be carried out.

Activities may be carried out in the workplace and in the student's own time

It is flexible

We have little experience in the use of this methodology

Source: based on Cabero et al. 2006

In e-learning (regarded as more modern), the **student becomes the active element** in the learning process.



As you can see, certain characteristics exist which set one type of learning process apart from the other. And these differences have resulted in e-learning becoming highly popular and gaining a strong foothold in the world of education.

Advantages of distance learning

The advantages of distance learning may be deduced from these characteristics.

- Flexibility in relation to space. Students may access the different content from anywhere, and are not required to go to the training center.
- Flexibility in relation to time. Studying times are flexible and may be scheduled in accordance with your own circumstances.
- Autonomy of learning. As a student, you may organize your working rhythm without having to consider the needs of your course colleagues. You may assign more or less time to each course content in accordance with your needs and skipping or dedicating less time to parts you believe you already know, and lingering on those that interest you more.
- Less direct costs to the student. Educational costs are drastically reduced, as distance learning systems are far more economical than classroom systems. The only expenditure you will have is the Internet access.
- Familiarity with information and communication technologies. Many students take advantage of distance courses to become acquainted with this type of technology and to catch up on the use of these increasingly necessary tools.
- Permanent access to the available material. As a student, all the course material is always within your reach and you do not need to wait for the subject to be addressed "in class".
- Multiple informative sources. In addition to the course content, links to Internet pages and other resources are provided which may be consulted directly.
- Easy interaction between all the students by means of different communication tools (mail, forums and chat rooms), enabling the same to put forward ideas, expose problems, conduct debates, group work, etc.
- A greater proximity amongst students/teachers than in classroom education. It is the communication tools which facilitate this means of

conducting consultations, clarifying doubts and discussing projects and works.

- Collective work via e-mail programs, transmission of files, chat rooms, etc.
- The possibility that you as a student will be assessed in a continuous manner. This assessment enables you be fully aware of the progress of your learning process, just as the tutor/professor is aware of this progress.

All these advantages have led to e-learning being used increasingly in educational processes at all levels, both in formal education (many universities have their own educational platforms enabling students to connect and follow the different online subscriptions), and in non-formal education (many of the courses geared to the unemployed are conducted via an e-learning platform).

This development has resulted in the creation of a great deal of content which may be delivered via a learning platform, where the quality of content is extremely variable in some cases.



Drawbacks of e-learning

These drawbacks need to be taken into account before (when the content is being compiled or the schedule is being drawn up) and during courses.

- More time invested by the teacher/tutor. Time needs to be spent on tutorials, the preparation of content, answering students' doubts/questions, etc.
- The need for minimum technological skills and knowledge on the part of both the student and tutor/teacher. The use of information and communication technologies is a requirement for handling different tools in order to access content.
- The student needs to have a certain capacity for autonomous learning. Many times, students find it hard to maintain a "certain discipline" to follow the course with no fixed timetable (as in classroom education).
- The quality of training may fall if the tutor/teacher-number of students ratio is unsuitable. This ratio needs to be balanced so one single tutor/professor doesn't have too many students on the same course.
- Greater effort on the part of the student than in traditional classroom teaching. The student should maintain a certain organization in relation to the time to follow an e-learning course.
- Low quality of many current contents and courses. The proliferation of courses of this type has had a negative impact on the quality of the same. This is an important factor to take into account, above all when it is the student who "looks for and chooses" the course.
- Resistance to changing from the traditional system. Many potential students are reluctant to take part in this type of learning process due to the fact they are more used to traditional classroom methods and do not wish to change.
- Student's loneliness. For some students this isolation presents a barrier which is difficult to overcome and affects their learning ability.
- Dependence on a good and fast Internet connection. In some regions, particularly rural, users experience certain problems with regard to the availability of quality connections needed to follow e-learning courses.

- ❑ Poorly trained tutors/teachers. The boom in this type of training method has meant that at times those in charge of running the process are not adequately prepared, which may cause problems for students.
- ❑ A lack of experience on the part of the students in this type of training. This may result in not taking full advantage of the course.
- ❑ The digital gap. Not knowing how to use the information and communication tools needed to be able to follow a course may present a barrier causing a student interested in the content to decide not to participate.

There follows a summary table of the most significant advantages and drawbacks in relation to e-learning.

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Advantages	Drawbacks
Customization of learning	A sensation of isolation due to a lack of direct contact with colleagues
Greater interaction between participants and tutor/professor	Connection problems: cost, technical and bandwidth problems
Development of training in collaborative and dynamic environments	Infrastructure: suitable computer equipment is needed:
Access at any time and anywhere: 24/7	The need for knowledge of the use of information and communication technologies
There are courses with content adapted to all types of needs	
No geographical barriers	
Speed in communication	
Students are active protagonists of the training process	

3. Practical e-learning applications: distance learning platform

You need to be aware that e-learning courses demand greater effort than traditional ones. Distance training requires commitment, although it offers students many advantages as we have already seen. One of the most important is the possibility of organizing your own rhythm of study. Information and communication technologies provide you with specific options which are not available on more traditional distance courses.

Before describing the platform via which you are going to take this course, you need to know what is an e-learning platform and how it works.

Many names have been given to it: distance learning platform, web tool, virtual platform, virtual de teaching/learning environment... All these terms may be defined as "computer applications designed to facilitate pedagogical communication among the participants of an educational process, and serve to distribute educational material in digital form (texts, images, audio, simulation, games, etc.), and access the same to conduct online debates and discussions on features of the syllabus of the subject in question, as a means of including relevant content from the Net or to enable the participation of external experts and professionals in the debates and chats" (Center for Education and New Technologies. University Jaume I).

Characteristics of these applications

Developed specifically for the educational sector

Include different Internet applications

Do not require the user to possess specific software or hardware, ensuring rapid access via an Internet access browser

Main features: management and administration; information and distribution; and communication between instructors and students in the context of different didactic situations and using different technological contexts

Source: De Benito y Salinas (2002)

E-learning platform: a computer application which allows to carry out training activities and which facilitates tools for the creation and distribution of content, management and administration and communication among all those participating in the process (students, tutors, teachers, administrators, managers).



In practice, a computer application looks like a webpage with an address to access the same. An Internet connection is therefore needed to gain access to the content of an e-learning course.

Depending on the type of management associated with the course, it is sometimes necessary to use a keyword to enter the platform and access content. The same platform provides students with this key once they have officially enrolled.

Once "inside" the platform, as a student, you will find different features to help you throughout the process. These features may be organized as follows:

■ **Contents.** Present the elements which need to be learned. These contents may be both theoretical and practical and be organized in several forms: by module, didactic unit, homogeneous content-block, chapter, etc. They involve more than the mere texts we see in traditional books or manuals. You will also find:

- Photographs and visual icons.
- Notes, warnings, advice, reminders, etc.
- Schemes and summaries.

- Simulations.
- Animations.

■ **Assessments.** This is a highly important feature as it helps you, the student, and the tutor, to get to know the level of assimilation of content. There are several types of assessment:

- True or false.
- Multiple choice. You have to choose one answer from several.
- Short answer. You have to write the answer to the question.
- File delivery. This option is used when the answer requires time or additional means to prepare it. The answer needs to be prepared in a specific format (word, powerpoint), this file is then attached and delivered by e-mail or via the platform.

■ **Other resources.** These are features which serve as support whilst learning the course content and provide you with additional information. They include:

- Glossary. It includes specific terms related to the course content.
- Bibliography and documentation. They include references to texts and documents related to the subjects dealt with in the course.
- Links. Connections to web pages related to the course content.

■ **Communication tools.** Beyond the classroom, we need to use different methods to be able to contact the tutor and course colleagues. There are two types of e-learning platform communication tools:

- Synchronous. Are those that are used at a certain time, when all the participants are present. They include the telephone and chat rooms.
- Asynchronous. May be used without participants coinciding in time. Forums, e-mails and notice boards are the most common.

4. The GreenFood project platform

Once we have presented the overall characteristics of e-learning and its practical applications, let us briefly review the platform you are going to use for the course.

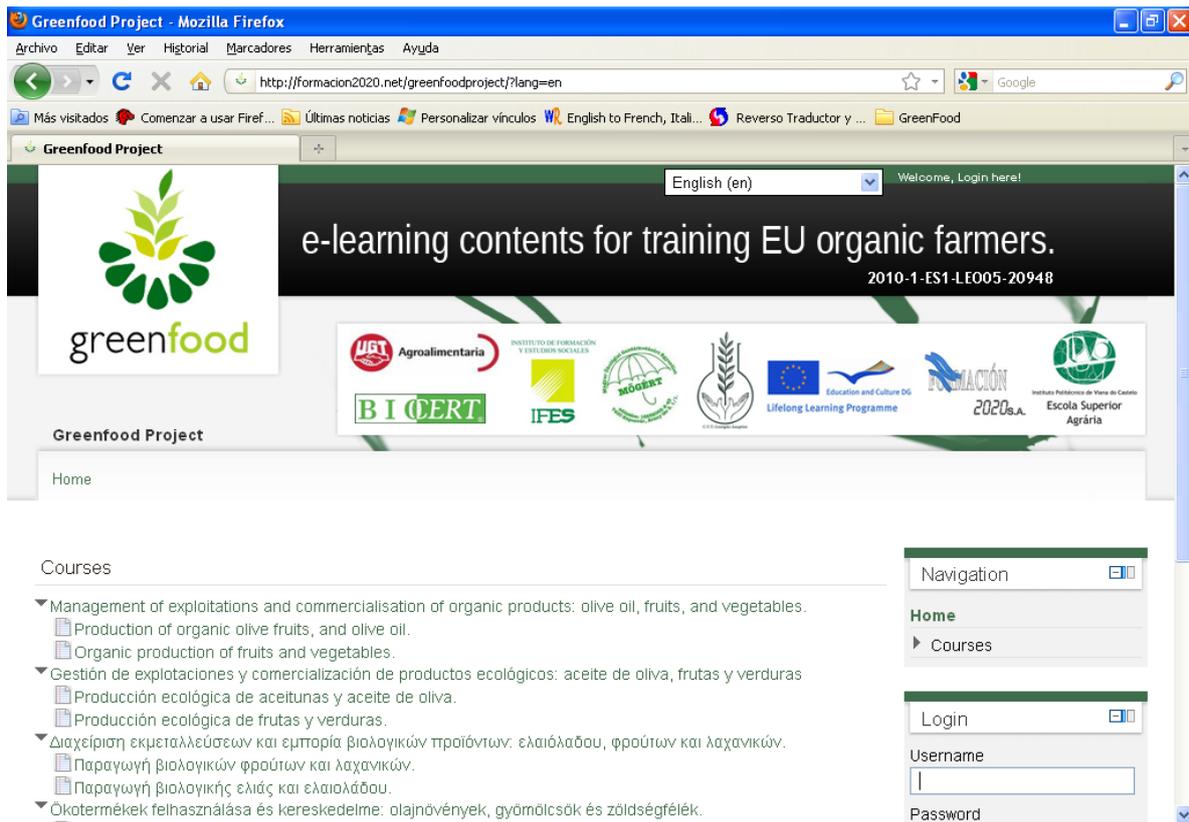
Remember that you need an Internet connection to access the platform. The address to be used is the following:

<http://formacion2020.net/greenfoodproject/>

We are going to briefly describe some of the platform's basic characteristics, including sampler images that will make easier to you to understand how it works. It is important you familiarize yourself with the platform so that by the time you start the course you have mastered the same and are able to focus on the course content without other distractions.



Once you have typed this web address in your browser, the following screen will appear in front of you:



You are now ready to access the course, its content and resources.

Theoretical description

Before going into more detail on the course platform, let us include a brief theoretical description of the same to help you to understand how it works. We are also going to give you some extremely useful practical tips on how to take an e-learning course.

Seen from the outside, the platform is a web site (Internet connection and suitable equipment needed) supporting user registration, on which individual students may adopt a role enabling them to interact in different ways with the platform itself and with the other users.

You will need the following equipment to access the platform:

- ❏ A PC: Windows or Macintosh.
- ❏ An Internet connection. The type of connection is not important, although the most recommended is an ADSL line.

- Internet browser connected: Internet Explorer, Chrome, Safari, Firefox, etc.
- The cookies on the browser you are using need to be activated.

Different types of user are present on the platform you are going to use for the course. The platform enables you to assign a series of roles to an individual, which allows the same to “do this and that” based on that role. For example, there is the role of the student (the one assigned to you) and this will enable you to access the course content, carry out self-assessments and the final assessment, answer the survey questions, etc. Another role is that of tutor/professor which will enable the same to edit the course content for students to see, mark your assessments, etc. Yet another important role is that of administrator, which enables the same to introduce any type of modification to the platform (alter the design, include specific resources, etc).

As a user in the student role, and to enable you to access the course content that interests you, you need to be registered. To this end, the platform will generate and deliver a personal and non-transferrable password to the e-mail address you have provided.

This password will have two parts:

- Username.
- Password.

You will not be able to access the course without these data. You will need to type in these data each time you connect to the platform.

Practical advice on how to approach an e-learning course.

We will now give you a few tips to help you plan and study. Remember you are the key player in your educational process.

- **Before you start.** It is important to familiarize yourself with the environment in which you are going to work. Visit the various tools provided by the platform and ensure you know how to reach the same when necessary.

Make a list of the content you need to assimilate and the assessments you need to conclude to successfully conclude the course.

Decide how much time you can and should dedicate to the course. Schedule the time to learn the content, allowing for any unforeseen circumstances or delays that might arise. Your distribution of time needs to be in accordance

with the rest of your personal activities so you are able to comply with the same.

Draw up a work schedule including:

- Date of the beginning and the end of the course.
- Assessments dates.
- Planning of content study.
- Possibilities of taking part in forums.

■ **During the study session.** Certain recommendations will help you to comply with the work schedule you yourself have drawn up.

- Begin when you are relaxed and have enough time to spare.
- Choose a quiet, well-lit and aired place and ensure you have everything you need.
- Read the introduction and the table of course contents carefully. These will guide you on what is to follow.
- Follow the texts and different elements of the course with care and at your own pace, repeating the same where necessary. Note down any doubts on a text document or a piece of paper to present to the tutor.
- Do not attempt to assimilate too much at the same time and in a theoretical manner.
- If the content includes an outline or summary, revise it. You can also prepare your own outlines or summaries to help you assimilate content.
- Deal with self-assessments (and the final assessment when the time comes) as this will help you in the learning process.
- Take advantage of the different resources to enhance the content provided (glossary, links, additional documentation, etc).
- Let "rest" what you have learned. All efforts need a little time to repose and to bear fruit. Later, test you remember what you have learned and measure it making the self-assessments.
- If you are in doubt or wish to speak to the tutor, use e-mail to communicate with him/her. Remember that his mission is to guide you at all times.

- Use the forum to raise issues you find difficult or in relation to which you require further information or opinions. Your course colleagues will be able to help.



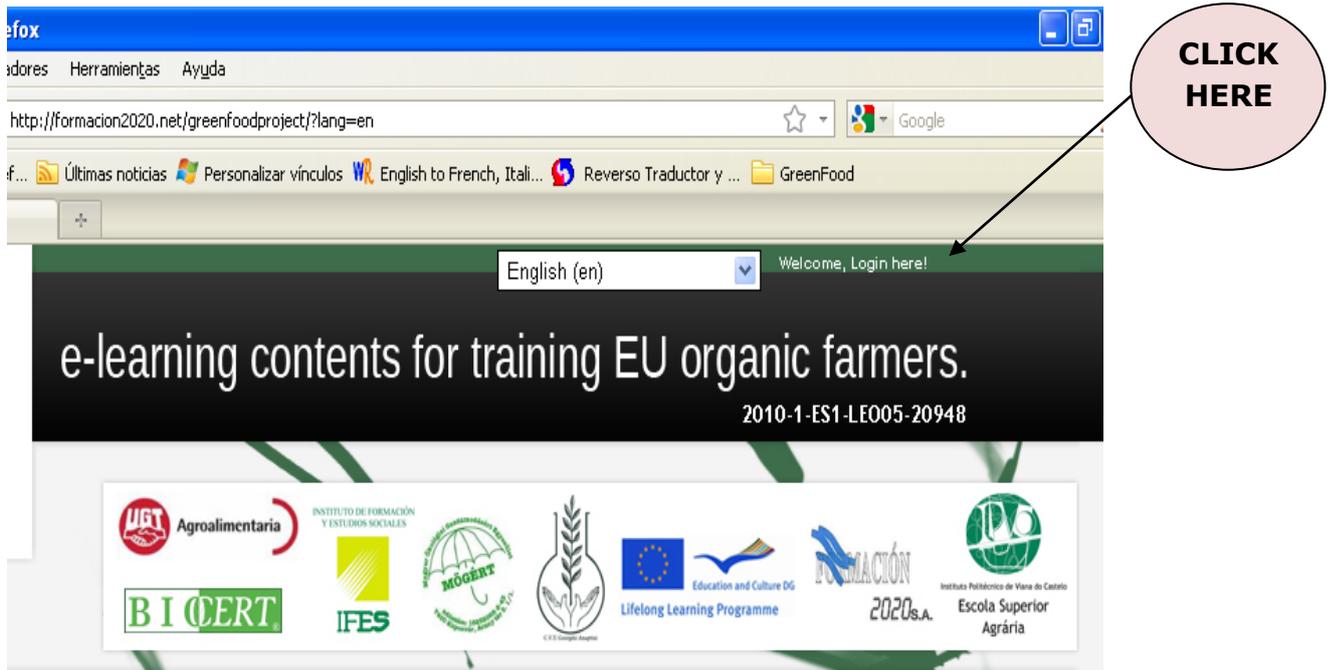
Practical description

As we have already explained, once you are on the course you will come face to face with different features: theoretical content, self-assessments, final assessment, glossary of terms, forums, etc.

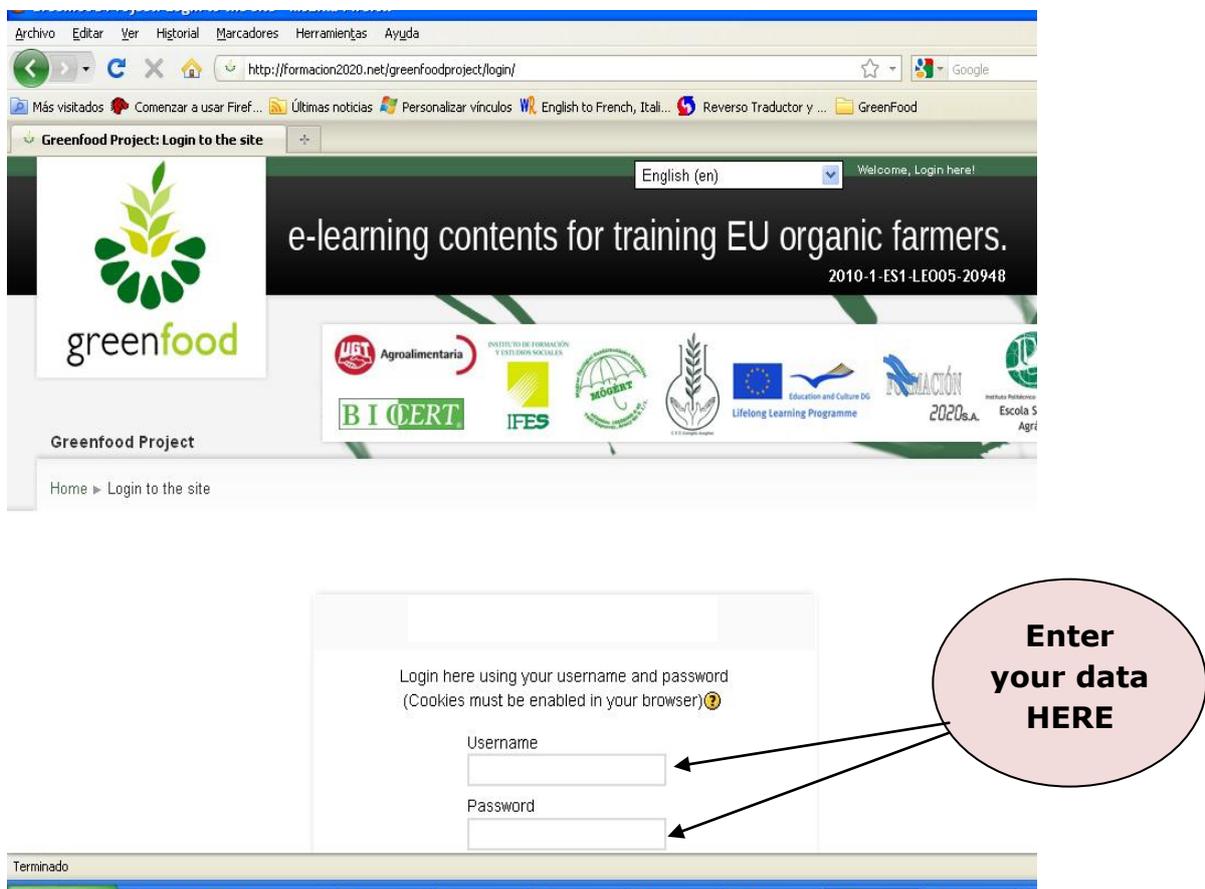
We are going to present to you each of these features within the course platform in a little more detail.

Once you have accessed the platform homepage to enter the course you have registered in, you will need to enter your user name and password.

In order to do so, you have to click in the proper section of the platform, as indicated in the following picture.



When you click on this option a window will open for you to enter your user name and password.



The platform will verify that your data are correct and you will be then given direct access to the course content and the different features and tools the platform offers.

We will now provide a brief description of these tools.

Features and resources

As we have seen previously, the e-learning platform features a series of tools and resources to help you learn the course content. We are going to describe these resources and show you how they appear in the platform.

- **Theoretical content.** Represent the central part of the course, and as you can see, take up most of the screen.

In this case the content has been placed in modules and each module in teaching units. The self-assessment of each module is included at the end of the same.

- **Self-assessments** Are tests you will find in each course module which enable you to evaluate the level of knowledge you have acquired. This will help you establish which areas you need to pay more attention to.
- **Final evaluation.** Before completing assessments you should ensure you are familiar with the knowledge, as they are automatically delivered to the tutor for marking once they have been completed. The same applies to the final evaluation.
- **Quality questionnaire.** This is a survey for you to appraise the quality and structure of the course, the platform, quality of content, the role of the tutor and all those features you regard as relevant. It is important you complete this survey as this information will serve to alter and/or improve those features which you as a student consider to be inadequate.
- **Bibliography and documentation.** Include documents and links providing additional information. This information may be extremely useful both for clarifying ideas and doubts and for expanding the basic knowledge provided by the course.

The links are connections to other websites or documents with additional information on some of the issues in relation to the course.

You now have a detailed description of your course and of the different features included in the same. As you will find out, the platform is simple to use and all

the resources are available at all times. It is important you are familiar with these resources, as it is to follow instructions and recommendations provided by the tutor in relation to the development of the course.

And remember that learning is a process which requires effort. Plan yours in accordance with your needs and possibilities to ensure you take full advantage of the course.



5. Bibliography

- E-learning: an analysis from the student's point of view. (*E-learning: un análisis desde el punto de vista del alumno*). Eva Martínez Caro. Universidad Politécnica de Cartagena (2008).
- Virtual platform in the scope of e-learning (*Las plataformas virtuales en el ámbito de la teleformación*). Julio Cabero Almenara, M^a Carmen Llorente Cejudo. Universidad de Sevilla. Electronic magazine "Alternativas de Educación y Comunicación" (*Alternatives for Education and Communication*). April 2007.
- Pedagogical bases of e-learning (*Bases pedagógicas del e-learning*). Julio Cabero. Revista de Universidad y Sociedad del Conocimiento. Volume 3 - Nº 1. Abril 2006.
- Educational quality in e-learning: its pedagogical bases. (*La calidad educativa en el e-learning: sus bases pedagógicas*). Julio Cabero Almenara. Universidad de Sevilla. Educación Médica. Volume 9, Supplement 2, December 2006.
- Report about e-learning in Spain. (*Informe sobre el estado de la teleeducación en España*). Arturo Azcorra Saloña, Carlos Jesús Bernardos Cano, Óscar Gallego Gómez, Ignacio Soto Campos. Departamento de Tecnologías de las Comunicaciones. Universidad Carlos III de Madrid. January 2001.
- Moodle Handbook. On-line training for trainers. (*Manual de Moodle. Formación on-line del profesorado*). Escola de Formació en Mitjans Didàctics. STEI-i Intersindical.
- Moodle: Users guide. An introduction to the tool for the virtual campus of the University of Las Palmas de Gran Canaria. (*Moodle: manual de usuario. Una introducción a la herramienta del campus virtual de la Universidad de Las Palmas de Gran Canaria (ULPGC)*). Enrique Castro López-Tarruella. Departamento de Bioquímica Biología Molecular y Fisiología (2004).
- Selection of a training/learning virtual environment of open code source for University of Jaume I. (*Selección de un entorno virtual de enseñanza/aprendizaje de código fuente abierto para la Universitat Jaume I*). Centre d'Educació i Noves Tecnologies de la UJI with the Servei d'Informàtica y del Gabinet Tècnic del Rectorat collaboration (2004).
- Webtools: Applications for virtual training systems (*Webtools: Aplicaciones para sistemas virtuales de formación*). De Benito, B. & Salinas, J. Aguaded; J.I. y

Cabero, J. (Dir.): Education through Web. Internet as a resource for the education. Grupo de tecnología educativa, Universitat Illes Balears (2002).

- Advantages of e-learning (*Ventajas del e-learning*). Juan Ignacio Accogli.
www.e-ntelequia.com .