



# DIDACTIC METHODOLOGY

## BIOTRANSF PROJECT

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## **Methodology of didactic adaptation.**

This document displays a series of guiding principles which try to facilitate the adaptation process, of the course of Biomass, from a national context, to an international one. Its illustrative condition implies a great flexibility at the time of interpreting them, however, they are basic didactic principles and they must be understood and be considered at the time of doing any formative activity, the success of the activity will depend, to a great extent, on this. Having the advice and the support of an expert in Didactics will make the task easier.

## **For whom the course is meant.**

The first thing to consider at the time of making a didactic adaptation is the students who must do the course, therefore, so first we must think about the profile of the people to whom we must display the end product. It is advisable to value aspects such as the age, the number and the formative and intellectual level, as well as the communication and computer skills of the students; this will allow us to adapt contents, activities and procedures better to them.

## **The resources we have.**

Once we know to whom our course is aimed, we must know what resources we have to do the course, this is the space, the didactic time, and didactic resources both material, or human, that will allow us to make a syllabus fitted and according to the duration of the formative process, the activities to do during the course and to the procedures to reach the goals.

## **Goals.**

The goals of a formation course are always to get the maximum advantage of the learning effort of the students, therefore, they must always be specific in the line of this principle, be adapted as much as possible to the contents and the thematic.

These are some possible objectives for the Biomass course:

1. To develop capacities to carry out a *self-learning*, using as education strategy the learning based on problems.
  - a. To develop the critical awareness, by identifying and hierarchizing in a suitable way the main problems in each case.
  - b. To acquire the important data by means of the text reading specialized magazines, consultations and interviews or research.
  - c. To communicate the new knowledge in an organized and summarized way.

- d. To manage the available information in intelligent way and with the maximum use of its intellectual abilities and cognitive strategies to communicate the development and results of its work.
  - e. To feel responsible for its own learning, still within the context of his/her group.
2. To apply techniques of Group Work, demonstrating capacities that allow him/her to form small work groups and to integrate himself/herself harmonically in them, in order to obtain a meaningful learning.
- a. To evaluate the individual work, the group work and the interaction processes between the different members.
  - b. To develop abilities of democratic discussion, learning to respect other people's opinions and to defend the own ones, looking for the consensus through conviction more than by dogmatic imposition.
  - c. To be aware of the advantages that the division of the different tasks has to improve the efficiency in a group work.
3. To acquire basic concepts on biofuels.
4. To examine the problems of the biofuels.
- a. To describe the most frequent ways of presentation of the biofuels.
  - b. To explain the role that every different biofuel has.
  - c. To look for information regarding to the exploitation system of the biofuels in each country.
  - d. To describe local aspects that could be important for the best advantage of the biofuels.

### **Procedures**

Being an online course, the methods and therefore, the didactic techniques and strategies must be adapted to a non actual formation, where the classic models do not work since the presence of the teacher does not exist as we understand it in a classroom.

For the open and remote system of education we must promote the collaborative work, the construction of learning communities in the cyberspace and the self learning as a starting point to develop the structure of our course. To promote self tutoring between the student, or the

searching on their own, could be two good collaborative techniques of group work and to apply in our model.

### **Activities**

Of all the set out principles until now, the activities will be most visible, and for this reason, those that mark the difference between a dynamic course or a purely theoretical one. The key is making a variety of activities which imply the interaction between students.

In a of e-learning course there are many interesting components, one of them is the virtual environment and with an enormous potential of resources. Internet represents a vast universe of knowledge arranged to be explored, it is only necessary to design the way to make it and to present it to the students in the form of formative activity.

At the time of designing our activities we must have in mind the consideration that the activities which imply different mental abilities are usually more motivating the people who do the activities; and it is positive for the acquisition of the knowledge; In the field of e-learning, this is easier thanks to the possibility to adapt the learning's to students through the platform .Moreover, since not all the people learn in the same way, it is important to include types of activities that imply different abilities and abilities; the variety in the activities and skills can contribute to the process of learning of each student.

### **Contents**

The course of Biomass is organized in two modules of theoretical contents, these are the parts of knowledge that we must transmit to our students, they are, basically, the raw material with whom we must work, with them we can design activities and different didactic proposals, group or individual activities that make our course as interactive and participative course.