



Co-funded by the
Erasmus+ Programme
of the European Union



BY FOREST EDUCATION

Lessons plan

BLOCK 1

Lesson 1 – Forest's Laboratory

Duration: 2 hours

Objective: development of mathematical, scientific, critical thinking, social competences, skills of work division, cooperation and responsibility.

Outputs: 1 film, 1 set of photos, 1 presentation of the results

Materials needed: metres, laces, markers, pens, A4 papers, smartphones

First session (30 min)

Participants introduce themselves and present their experience regarding the forests they have visited, activities they have realized in the forest, what they have learned about the environment, especially forests.

Second session (30 min)

Participants are asked to explain how they can find a certain location in the forest and if they know how to use a smartphone in order to indicate a certain place. The necessary smartphone applications are downloaded in order to find their exact location by using their smartphones. Participants will be able to send their location to other smartphones, in order to mark specific areas.

Third session (1h)

During this session participants will work with trees.

1. Teacher will divide learners in pairs and will ask them to measure the distance between trees, in order to calculate their average density in the forest.
2. Teacher will mix up the teams and participants will be asked to calculate the age of the trees by measuring their perimeter and divide the amount by 2,5.

Lesson 2 – Forest's Laboratory

Duration: 2 hours

Objective: development of mathematical, scientific, critical thinking, social competences, skills of work division, cooperation and responsibility.

Outputs: 1 film, 1 set of photos, 1 presentation of the results

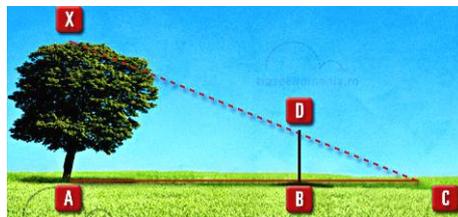
Materials needed: metres, sticks, laces, markers, pens, A4 papers, smartphones, pictures

First session (30 min)

Teacher will talk about local forests and the eco-system, paying attention to the trees, insects, animals, birds their morphology. Participants are asked to tell their opinion regarding the trees which are predominant in the forest, and also predominant insects, birds and animals met here.

Second session (1h)

Participants are divided in pairs and asked to measure the height of trees. In order to do that they measure their height and shadow and the shadow of the trees. They are taught how to find the height using Thales Theorem



Third session (30 min)

Participants will be asked to look at the moss on the bark of the trees and find the north. This an ancient way to find the north without any other tools. It is suggested to look at the middle of the trunk: if there is moss in one of the sides that means north direction.

Lesson 3 – Forest's Laboratory

One session (4 hours)

Participants are asked to find specific plants for the area they are in: mushrooms, grass, trees. To figure out differences, participants will be taught how to search on the internet sites and where. They will photo the plants and compare with those they have found on the internet. Among the plants they have found, they identify medicinal plants. They will photo them and learn what those plants are good for, in the traditional way in their district or town.

Lesson 4 – Forest's Laboratory

One session (4 hours)

Participants are asked to identify the specific trees in the forest they are in and find out their

age. Then they are asked to find information on the internet about the way they were used during the history in the construction of houses.

The teacher trainer will demonstrate them with the help of the programme Sketch Up how to design a wooden construction for their own purpose. The participants will use the computer to create house with Sketch Up programme which can be downloaded for free in educational purpose from the internet.

Andrei Tamasanu, marking a documentation area in the woods for his colleagues



Using smartphones as compass
in order to be able to find a way in the woods