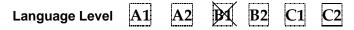
# **Guidelines for CLIL Units**

Unit Title:	Stars,	life and	chemistry
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**Topic:** hypothesis about life formation on the earth

Subject area: Chemistry, biochemistry and cross circular: physics, astronomy, biology.

Language: English



Target group: technical high secondary school

**Time:** 10 academic hours

## Aims:

An approach to the extraordinary mechanisms that probably started the life on our planet,

through the chemical processes which are the basis of life, as a means to awake interest in scientific researches

skills: developing a methodology for dealing with an interdisciplinary study

## knowledge:

- notions about organic chemistry, nuclear chemistry, biochemistry, cell structure, physics, astronomy.

- cooperative learning using web tools
- scaffolding techniques to improve learning

## Methodology, classroom activities:

- Teacher's presentation
- Peer tutoring
- Individual activities
- Pair/Group work
- Internet research
- Multimedia tools

Assessment tools: oral tests, conversation, written test, homework, feedback

#### Evaluation criteria:

## - for language

use of grids to evaluate both oral and written linguistic production

congruence between technical and academic language

## - for content

basic knowledge about:

- the structure of fundamental bio molecules and their functions in cell
- the mechanisms of transcription and translation
- fundamental differences between eukaryotic and prokaryotic cell
- the formation of elements and bio molecules in the universe

Students will be able to relate the above mentioned contents in English language

#### Documents and materials:

File power point, word, photocopies

## **Description:**

## Steps

- Power point presentation.

The presentation of the topic in the classroom through a power point file will include the following activities:

- reading and content understanding
- explanation and debate with the students
- listening to sound files and audio-visual archive for the understanding of the language
- 2) questions assigned to groups of students as homework
- 3) Review and discussion of the homework
- 4) Assign final test