ERASMUS+ KA1 · TEACHER TRAINING COURSE

Teaching Science

5 Days • Heraklion, Crete • OID: E10020547

About the course

We need inspired scientists, and it all starts at school. Science develops students' ability to ask questions, investigate, form hypotheses and draw conclusions, and children of all ages benefit from it. The key is motivation for both teachers and children, and relating science to everyday life.

The course helps teachers improve science lessons and projects from kindergarten to secondary school through fun, innovative and low-cost approaches, and provides lesson plans for running science clubs in their own countries.

Course at a glance

Duration: 5 training days

Location: ErasmusLearn Training Center, Heraklion, Crete

Language: English (B1 or higher recommended)

Who it's for: Primary and secondary teachers

Level: Introductory, open to all

Certificate: Certificate of Attendance

Funding: Eligible for Erasmus+ KA1 (course fees)

OID: E10020547

What you will learn

- Develop a scientific mind and teach the scientific method
- Introduce AI through fuzzy logic and simple machine learning
- Bring art, creative writing, music and maths into science lessons
- Create a science e-book and take first steps in 3D design
- Turn ancient Greek inventions into hands-on science projects
- Use Arduino or micro:bit in problem-based science projects
- Create virtual science games and a simple escape room

How you will learn

Lectures, hands-on experiments, creative workshops, coding and circuit labs, teamwork and a museum study visit.

Course language

English. B1 level or higher is recommended. Practical, hands-on activities make it easy for everyone to take part with confidence.

What's included

- Coffee Breaks that include traditional products.
- Guided tour of the Historical Center of the town.
- Dinner in a traditional restaurant in the town.
- Europass Mobility.
- A small gift with traditional Cretan products.
- Certificate of Attendance, for participants who attend at least 80% of the course.

Course Agenda

DAY 1 · Welcome & Orientation

- Welcome, practical arrangements and course timetable
- Presentation of participating organisations
- Icebreakers and introduction to the course

DAY 2 · Scientific Thinking & AI

- Developing children's ability to learn how to learn
- Developing a scientific mind and attitude
- The importance of creative thinking
- The scientific method through a simple experiment
- Introduction to AI: fuzzy logic
- Using basic machine learning to address challenges

DAY 3 · Art, STEAM & Creative Science

- Art in STEAM education (lecture and workshop)
- Creating our first e-book
- Creative writing: science haikus and tweet stories
- Fun with maths, intro to 3D design, music and the fruit piano
- Included: guided cultural tour of the historical centre of Heraklion
- Included: dinner at a traditional Cretan restaurant

DAY 4 · Museum of Ancient Greek Technology

- Guided tour: "Ancient Greece – the origin of technologies"
- High-tech inventions then and now: 70+ working reconstructions
- From Philon's robot-servant to the Antikythera mechanism

DAY 5 · Microcontrollers, Games & Next Steps

- Microcontrollers (Arduino or Micro:bit) in science education
- Problem-based projects and block programming
- Building and testing real circuits
- Creating virtual science games and a simple escape room
- Erasmus+: priorities, actions, budget and tips for applicants
- Planning follow-up and dissemination of learning outcomes
- Course evaluation and certificates

ErasmusLearn

Inspire, Learn, Communicate, in the best hospitality environment.

Ready to join? Book your place at www.erasmuslearn.eu

erasmuslearn@gmail.com

+30.2810-312123