

Speleology, Hiking and Botanical Exploration:

Enhancing Environmental Awareness through Field Activities and Digital Education

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1. Course Introduction

For over five years, the “Galileo-Curie” High School has been organizing the “Speleo-Hiking Course,” aimed at promoting environmental awareness and the preservation of local biodiversity through theoretical lessons, hiking activities, and speleological and botanical fieldwork.



2. Main Course Activities

The course is organized in two main sections:

Laboratory lessons: four two-hour lessons focused on the main geological features of the territory, equipment and safety during hiking activities and biodiversity conservation.

Field trips: four excursions involving hiking and cave exploration, allowing students to observe vegetation, karstic phenomena, rock formations and cave ecosystems



3. Digital Innovations

Starting from the current year, the course will introduce the use of free software for plant recognition, the collection of field photographs to be shared in a common online repository and a final computer-based laboratory session to create digital products such as an ebook illustrating a **digital Herbarium**, which will be published on the School's website.

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4. Benefits for students

Through these activities, students will develop skills in ecological observation, geological analysis, botanical classification, digital content creation, and collaborative learning, enhancing both scientific knowledge and soft skills. Students who attend all planned activities will be awarded formative credits.



5. Key Reflections and Outcomes

As part of the school's Educational Offer Plan, this initiative underscores the power of an interdisciplinary approach in fostering sustainable values among younger generations. By integrating digital tools and AI technologies, it ensures that the knowledge and experiences gained extend beyond the classroom and the field activities, encouraging a broader culture of environmental responsibility within and beyond the school community.