

## MEIO ERASMUS+

Our **OID**: E10049116



## Course 2 - OutDoor Activities and Mapping in STEM

ERASMUS + - Key Action 1: Learning Mobility of Individuals<sup>1</sup>

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### OutDoor Activities and Mapping in STEM

This course is targeted to STEM (Science, Technology, Engineering and Mathematics) teachers who want to integrate in their classroom activities and projects, i.e eTwinning projects, new approaches of teaching through the use of Google mapping technologies, such as: Google MY Maps, Google Earth, Google StorySpheres, Google MY tracks and other tools. This course will have outdoor activities to collect data (images, sounds and videos) to be use during the course activities. So we ask you to bring comfortable clothes and shoes.

- With **Google MY Maps** you can create easily relevant maps with information from the work of your students. The maps can easily be embedded on a website. Also with Google My Maps it's possible to share a map with a partner with edition permissions. This way we can promote the principle of collaborative work.
- **Google Earth** is a tool with huge pedagogical value. Google Earth allows you to travel the world through a virtual globe and view satellite imagery, maps, terrain, 3D buildings, and much more. With Google Earth's rich, geographical content, you are able to experience a more realistic view of the world. You can fly to your favourite place, search for historical and cultural places and even navigate through directions.
- **Story Spheres** is a way to add stories to panoramic photographs. It's a simple concept that combines the storytelling tools of words and pictures with a little digital magic.  
- An example on how to use Story Spheres. Create a "story" with a 360º Photo. Imagine the possibilities for subjects such as: Geography, Biology, History, etc.

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<sup>1</sup> [http://ec.europa.eu/programmes/erasmus-plus/documents/erasmus-plus-programme-guide\\_en.pdf](http://ec.europa.eu/programmes/erasmus-plus/documents/erasmus-plus-programme-guide_en.pdf) (p. 30)

- **Tour Builder** is a new way to show people the places you've visited and the experiences you had along the way using Google Earth. It lets you pick the locations right on the map, add in photos, text, and video, and then share your creation;

**More information about this course:** <https://sites.google.com/site/meiomaptools/>

By participating on this course you can get the **Europass Mobility Certificate**.

[www.europass.ie/europass/euro\\_mob.html](http://www.europass.ie/europass/euro_mob.html)

## Course Organization

This is one-week course organized with educational and cultural activities.

### Day 1

#### Icebreaking Activities

#### Introducing to Google Mapping Technologies

- What can I do with that in my classroom?
- Google Mapping Tools in:
  - Primary School
  - Maths
  - Geography
  - Literature
  - History
  - Biology
  - Economy
- Examples of integration in educational contexts

#### Google Earth

- What is Google Earth?
- Exploring Google Earth
- Google Earth and Layers
- Creating a multimedia track with Google Earth
- How to integrate it in educational contexts

### Day 2

#### Google MY Maps

- Exploring Google MY Maps
- Creating collaborative Maps
- Creating a Quiz with MY Maps

- How to integrate it in educational contexts

### Day 3

#### My Tracks and Tour Builder

- Exploring Google MY Tracks
- How to record a track with Google MY Tracks.
- Exploring Tour Builder
- Creating a virtual tour with Tour Builder
- How to integrate it in educational contexts

### Day 4

#### Creating PhotoSpheres and Story Spheres

- What is 360 photos?
- Apps to take 360 photos
- Creating 360 photos
- Creating virtual stories with StorySpheres
- How to integrate it in educational contexts

### Day 5

#### Project definition

- Proposing a project framework
- Creating in pairs a project proposal to integrate Google Mapping Tools in Classroom
- Presentation/discussion of the projects proposals

## Objectives

This course aims to help teachers, mainly STEM teachers, to be able to improve their capacities in dealing with motivating tools that can easily improve their teaching methods. So, in this course, we will mainly explore the amazing mapping tools from Google. This pack of tools consists in a mix of web platforms, mobile apps and desktop software. This course will teach how to explore these tools and how to integrate them in pedagogical contexts.

## Target

STEM teachers that want to improve their knowledge and competences in the use of new tools, in this particular case, Google Mapping Tools. For schools that want to give their teachers and other educational staff the opportunities and incentives to acquire new competences with the aim of creating educational activities that are connecting with the digital competences of XXI century.

## Outcomes

- improved competences, linked to their professional profiles;
- knowledge to manipulate new tools that will enhance classroom activities;
- better quality of their work and activities in favor of students, trainees, apprentices, pupils, adult learners, young people;
- increased opportunities for professional and career development;
- increased motivation and satisfaction in their daily work.

## Programme Package – Price

This program starts on **Sunday** and goes to **Saturday**

- Course fee (5 days – 70€ per day) ..... 350€
- Program fee ..... 180€
- Accommodation\*(6 nights – 95€ each)..... 570€

Total per participant ..... **1100 €**

*\*Accommodation in double shared rooms. If you prefer any other type of accommodation, please contact us.*

The accommodation place is an old house rebuilt where you have access to all the spaces such as: the garden, the living room and the terrace. The training center is in the same building as the house accommodation.

### **Food restrictions, allergies and Intolerances:**

In Meio we serve typical Portuguese dishes. The meals included on the course are part of the immersive experience by tasting the Portuguese flavors and dishes. Special diets or other food requests timely planned can be provided with additional costs. Contact us by email for further details.

We do not take any responsibility in what concerns participants to food intolerances. Nevertheless, we are open to help and support in finding a solution that fit your needs.

### **We kindly ask you to bring your devices.**

### **This package includes:**

- Course Certificate of Participation
- Mobility Pass Certificate
- Insurance for the participants
- 20 hours training
- Internet Access
- Daily Coffee Breaks
- Daily Breakfast, Lunch and Dinner
- Airport Transfers: Arrival and Departure from/to Lisbon Airport (*we provide one transfer for all the group. So the schedule of the transfer departure depends on all the flights participants. This means that the time will be the most suitable for all*)

- Visit to a local school
- Cultural and historical tours – four half day trips
  - One day tour to the city of Lisbon (lunch and monuments entrance not include)
  - Visit to city of Santarém
  - Visit the beach of Nazaré (the big waves beach)
  - Visit to the mediaeval village castle of Óbidos
- Farewell dinner

**It also includes:**

Tours with transportation to visit to the Natural Park of Serra de Aire and Candeeiros (could include visit the Algar do Pena Cave and to the dinosaur footprints in Valley of Meio), visit to the city of Santarem where you can taste the conventual sweets, visit to Nazaré Beach (opportunity to visit the world famous North Beach) with traditional lunch and visit to the town of Obidos with **ginjinha** drink in chocolate cup).

**Extra-activities can be provided**, such as: Tour to Fátima, tour to the city of Tomar with visit to Convent of Christ, and tour to the Monasteries (Batalha and Alcobaça). These activities are only organized for a minimum number of participants. Contact us for prices or other information's.

## Course organization

Our weekly plan is usually organized according this structure. So, if you're ready to be creative and eager to learn something, came and join us.

Day 1	Day 2	Day 3	Day 4	Day 5
<p><b>Icebreaking activities</b></p> <p><b>Introducing to Google Mapping Technologies</b></p> <ul style="list-style-type: none"> <li>➤ What can I do with that in my classroom?</li> <li>➤ Google Mapping Tools</li> <li>➤ Examples of integration in educational contexts</li> </ul> <p><b>Google Earth</b></p> <ul style="list-style-type: none"> <li>➤ What is Google Earth?</li> <li>➤ Exploring Google Earth</li> <li>➤ Google Earth and Layers</li> <li>➤ Creating a multimedia track with Google Earth</li> <li>➤ How to integrate it in educational contexts</li> </ul>	<p><b>Google MY Maps</b></p> <ul style="list-style-type: none"> <li>➤ Exploring Google MY Maps</li> <li>➤ Creating collaborative Maps</li> <li>➤ Creating a Quiz with MY Maps</li> <li>➤ How to integrate it in educational contexts</li> </ul>	<p><b>My Tracks and Tour Builder</b></p> <ul style="list-style-type: none"> <li>➤ Exploring Google MY Tracks</li> <li>➤ How to record a track with Google MY Tracks.</li> <li>➤ Exploring Tour Builder</li> <li>➤ Creating a virtual tour with Tour Builder</li> <li>➤ How to integrate it in educational contexts</li> </ul>	<p><b>Creating PhotoSpheres and Story Spheres</b></p> <ul style="list-style-type: none"> <li>➤ What is 360 photos?</li> <li>➤ Apps to take 360 photos</li> <li>➤ Creating 360 photos</li> <li>➤ Creating virtual stories with StorySpheres</li> <li>➤ How to integrate it in educational contexts</li> </ul>	<p><b>Project definition</b></p> <ul style="list-style-type: none"> <li>➤ Proposing a project framework</li> <li>➤ Creating in pairs a project proposal to integrate Google Mapping Tools in Classroom</li> <li>➤ Presenting projects proposals</li> </ul>