





Erasmus+ AGTn Steam

# TPM and LTT3 Italy 6 - 12 November 2022

The programme includes:

- (a) The Project Meeting aiming at discussing management of the project. The meeting will start on Sunday the 6<sup>th</sup> of November in the afternoon at POST – Perugia Officina per la Scienza e la Tecnologia – science center and will continue on Monday morning till lunchtime at Planetario Danti at ITTS A. Volta
- (b) The Training Sessions lasting 5 days organized by PSIQUADRO jointly with ITTS A. Volta and taking place at Planetario Danti from Monday the 7<sup>th</sup> of November in the afternoon till Saturday the 12<sup>th</sup> at lunchtime.

Two excursions are planned: the first to visit the Perugia historical city center and the second to visit Assisi historical city center. Visits will focus on cultural connections with the training program.

## Formats

- (a) Introduction 45 minutes by an expert Followed by practical workshops develop in parallel
- (b) Presentation of case studies followed by applications of the same techniques

#### Locations

- Perugia Officina Per la Scienza e la Tecnologia POST Science Centre
- Planetario Danti and ITTS Volta Planetarium and Technical High School

#### Excursions

- Perugia city center and museums
- Assisi (Note: departure times to and from Assisi will be confirmed accordingly to the autumn schedule of public transports)

#### Social events in the evenings

Social events are under development and will be communicated in the programme release one month before the meeting.

Day 1 – Sunday 6 Nov 22 - 15.00 – 17.30 - <u>POST Science Centre – Perugia Officina per la Scienza e la</u> <u>Tecnologia</u>

**15.00** – Welcome and Introduction to the Science Centre

15.30 – 16.00 Warm up activities: Introducing myself – icebreaker game

16.00 – 17.30/18.00 Welcome by the project coordinator and first part of the TPM

- Conveying a message from the Director of DDE Larissas (coordinating organization)
- Budget, financial aspects and reporting (pptx 25 slides)
- Questions, free discussion









20.00 - Dinner in the city center









# Day 2 - Monday 7 Nov 22 - 9.00 - 17.30 - ITTS VOLTA and PLANETARIUM

The day is organized into two parts: 9-30 – 12.30 (TPM 2nd part); 14.30 – 17.30 (LTT first session)

**9.00 – 9.30** Welcome by the headmaster Prof. Fabiana Cruciani.

**9.30 – 10.00** Space and STEAM education - Why we are in a Planetarium and what process is going on to turn it into the new *Volta SpaceLab*: from stargazing to space science and technology careers for young generations.

*Prof. Leonardo Alfonsi (Physics teacher at Volta and scientific director at Psiquadro social enterprise)* 

10.00 – 11.00 School Visit

Organization of school workshops and presentation of facilities - Introductory and interactive tour of school laboratories and the Ignazio Danti Planetarium.

11.00 coffee break

11.30 – 12.30 Project Meeting second part

- Evaluation of the progress of the project so far. Brief introduction by the coordinator and free discussion afterwards:
  - are the goals of the project achieved so far?
  - how were teachers helped to create educational scenarios?
  - are the results disseminated to the students?
  - if not, what should be changed?
  - are we happy with our participation and our contribution in the project?
- Next activity planning

12.45 – 14.15 lunch break at school canteen or in the planetarium

**14.30 – 15.00** LTT opening: Introduction of the basic educational concepts that will be explored during the week. Schedule and goals of the LTT activities

**15.15** – **16.00** The Erasmus + at Volta: how we are engaging students with space, math and computer science and coding

Prof. Paolo Cantarella (IT teacher at at ITTS Volt), Prof. Claudia Cardinali (IT teacher at at ITTS Volt) Prof.ssa Barbara Marcugini (Math teacher at ITTS Volta),

**16.15** – **17.00** Storytelling and STEM education a case study: The Moon landing 50<sup>th</sup> anniversary and the scenario workshop educational method used by the ITTS Volta.

Prof.ssa Francesca Farinelli (Teachers of Literature at ITTS Volta)

17.00 – 17.30 Discussion and presentation of the next day schedule









## Day 3 - Tuesday 8 Nov 22 - 9.00 – 17.30 - ITTS VOLTA and PLANETARIUM

#### 9.00 – 9.30 Warm up exercise

**9.30 – 10.30** Introduction to the workshops of the day: how storytelling and news can inspire STEAM activities in the classroom. Example from the ongoing AGTn at Alessandro Volta. Organization of the working groups. The team will be divided in 4 working groups each of them will have the same task but each of them has to come up with a different solution:

(a) Identify a relevant breaking or current news related to space science and technology

(b) Identify possible connection with ancient Mediterranean myths or technologies (Greece, Ancient Rome and Egypt) (e.g.: The new mission ARTEMIS ad the Myth of ARTEMIS, or the stories related to the Moon and its observation in the ancient Greece)

(c) Develop an educational activity inspired by identified topic. The educational activity can be: a workshop, a science demonstrations, the development of a multimedia content etc... each group can choose its wo didactical tool)

10.30 - 11.30 News search on the web possibility

11.30 – 11.45 Coffee break

**12.00 – 13.00** Creating connection between the news and the steam topic relevant to your class

13.15 – 14.30 lunch break at school canteen or in the planetarium (TBD)

14.45 – 15.30 Quick feedback from the working groups. Suggestions to tackle possible issues

15.45 – 16.00 Coffee break

16.00 – 17.30 Developing the format of the educational activity

Day 4 - Wednesday 9 Nov 22 - 9.00 – 12.30 - <u>ITTS VOLTA and PLANETARIUM</u> – 13.30 – 18.00 Launch and tour of Perugia Historical City Center

**9.00 – 9.15** Warm up exercise

**9.30 – 11.00** Continuing the educational activity development

**11.00 - 11.15** Coffee break

**11.30** – **13.00** Presentation of the activities: each of the 4 working groups presents its results In a slot of 20 minutes: a 5' presentation of the education module rational and structure and a 15' for comments and questions from the other participants are delivered.

**13.00 – 13.30** Transfer to the Perugia city centers

13.30 – 14.45 Lunch in the city center









15.15 – 17.30/18.00 Start of the historical city Center visit till 17.30









### Day 5 - Thursday 10 Nov 22 - 9.00 - 17.30 - ITTS VOLTA and PLANETARIUM

**9.00 – 9.15** Warm up exercise

**9.45 – 10.30** Introduction to the European project toolkit Our Space Our Future and introduction to the works in parallel

The team will be divided in 4 new groups each of them will have a different task of adaptation and development of new activities inspired by 4 of those taken from the Our Space Our Future toolkit, namely:

- (a) a space bingo,
- (b) an interview with scientist,
- (c) a science show, and
- (d) a tinkering activity.
- 10.30 11.00 Quick feedback from the groups shared within the full team
- **11.00 11.15** Coffee break

11.20 – 13.00 Continuing the work in groups

13.15 – 14.30 Lunch break at school canteen or in the planetarium (TBD)

**14.45** – **15.30** Quick feedback from the working groups and suggestions to tackle possible issues

15.45 – 16.00 Coffee break

16.00 – 17.30 Groups continue to work of activities adaptations

## Day 6 - Friday 11 Nov 22 - 9.00 - 17.30

**9.00 -11.00** Presentation of the adaptation of the activities and comments developed durig the previous day.

**11.30** departure to Assisi

13.00 Lunch in Assisi

14.30 - 18.30 Visit of Assisi historical city center

18.30 Departure to Perugia







# Day 7 - Saturday 12 Nov 22 - 9.00 - 12.00 - ITTS VOLTA and PLANETARIUM

**9.00 – 10.00** Wrap up a week of Space ad STEAM education + Introduction to ESERO Resources

Leonardo Alfonsi (Psiquadro)

**10.00 – 11.00** Feedback from the groups and suggestions for further development

**11.00 – 11.15** Coffee break

**11.15 – 12.00** What's next: closing session by the project coordinator.

Short online evaluation of 3<sup>rd</sup> LTTA in Italy.

Certifications of attendance.