

Academy of Research Methodologies

Introductory meeting

Immersive VR | 360° Video module
Mapping and Drone module

Geourbanistica

Planning and Management of Tourism Systems

Text Sciences and Culture Enhancement in the Digital Age

Università degli Studi di Bergamo, sede di Via Salvecchio, 19

The goals of the "Academy of Research Methodologies"

This innovative teaching program intends to **promote the dissemination of skills** related to the use of digital tools connected to:

- Tourist valorisation
- Territorial analysis and planning,
- The study of immersive digital landscapes,
- The analysis of immersive transcoding
- The application of Augmented/Virtual reality and viewers



Scientific coordinators

Prof.ssa Alessandra Ghisalberti

alessandra.ghisalberti@unibg.it

Prof.ssa Federica Burini

federica.burini@unibg.it

Prof. Marco Tononi marco.tononi@unibg.it

Teaching staff

Immersive VR | 360° Video module

Dott.ssa Elena Vittoria Soffientini <u>elenavittoria@plat1.it</u> **Mapping and Drone module**

Dott. Umberto Fede

umberto.fede.uf@gmail.com

Dott. Edmondo Pietrangeli

edmondo.pietrangeli@unibg.it



Programme

Martedì 16 aprile 2024/ Tuesday April 16 2024

17.00 - 19.00 Incontro conoscitivo/ Introductory meeting Online Microsoft Teams

Sabato 20 aprile 2024 / Saturday April 20 2024 9.00 - 11.15 / Video, Video Digital Lab via Salvecchio,19 11.30 - 13.00 / Mapping e Drone, aula 9 via Salvecchio,19

Sabato 27 aprile 2024 / Saturday April 27 2024 9.00 - 13.00 / Video, Video Digital Lab via Salvecchio,19

Sabato 4 maggio 2024 / Saturday May 4 2024 9.00 - 11.15 / Video, Video Digital Lab 11.30 - 13.00 / Mapping e Drone, aula 9 via Salvecchio,19 **Sabato 11 maggio 2024** / Saturday May 11 2024 **9.00 - 11.15 / Video**, **Video Digital Lab 11.30 - 13.00 / Mapping e Drone**, **aula 9** via Salvecchio,19

Sabato 25 maggio 2024 / Saturday May 25 2024 **9.00 - 13.00** / **Mapping e Drone**, **aula 9** via Salvecchio,19

Venerdì 31 maggio 2024 / Friday May 31 2024 9.00 - 11.15 / Video, Video Digital Lab via Salvecchio,19 11.30 - 13.00 / Mapping e Drone, aula 9 via Salvecchio,19

Giovedì 6 giugno 2024 / Thursday June 6 2024

14.00 Restituzione finale dei lavori / Final presentation of the projects aula 7 via Salvecchio. 19

Immersive VR & 360° Video module plan

Dott.ssa Elena Vittoria Soffientini

April 20. **1st lesson: Introduction to traditional Video Editing, pre-production, storytelling, editing software and workflow.**

Second part: Introduction to VR set and 360° Video Editing planning, logistics, editing software, devices and workflow.

April 27. **2nd lesson: Introduction to Google Earth Studio framework to produce VR videos based on Google Earth's satellite and 3D imagery.**

Second part: creation of a 360° video with Google Earth Studio then importing, editing and exporting the video with Adobe Premiere Pro.

May 4. 3rd lesson: Introduction to shooting 360° panos and video with Ricoh camera, setting the hardware and installing App software.

Second part: moving outdoors to shoot 360° panos and videos, then importing, editing and exporting them with Adobe Premiere Pro.

May 11. 4th lesson: Advanced concepts on video editing and shooting techniques for VR.

Second part: differences in exporting and watching an Immersive VR video with traditional players (VLC or YouTube) or with a VR set (Oculus Quest 2).

May 31. 5th lesson: In-depth analysis of the creation and editing of VR applications, analysis and examples of interactivity and gamification.

Second part: laboratory activities and final delivery of the personal project.



Mapping and Drone module plan

Dott. Umberto Fede | **Dott. Edmondo Pietrangeli**

April 20. 1st lesson: Introduction to GIS systems.

Second part: practical activity of QGIS software, Google Earth).

May 4. **2nd lesson: Use of drones for territorial planning in synergy with mapping tools**.

Second part: online mapping.

May 11. 3rd lesson: How to design a map: goal, target and criteria.

Second part: laboratory activities on personal projects.

May 25. 4th lesson: Field trip to Città Alta for georeferencing activities.

Second part: laboratory activities and draft review of personal projects.

May 31. **5th lesson: The narrative of places through the gaze of drones**.

Second part: practical drone flight demonstration and final delivery of the personal project.

Final projects.

Immersive VR & 360° Video module: to successfully complete the course, students will have to **develop and create an immersive 360° video** to be enjoyed with the *Oculus Quest 2 VR headset* or at least with a *traditional player* (e.g. VLC player).

Mapping and Drone module: the final project will consist of the production of a **small cartographic project** using QGIS software. In alternative the students can choose to create an **online map**. It depends on the personal needs or interests of the students.

The final project can be created by group work.

The presentation of the final project will be on June 6th



Deadlines and attendance

May 25th 2024 - draft delivery and general review

May 31st 2024 - final term for delivery of the complete work

To successfully complete the course the student will attend at least the **75% of lessons**

Round-table

And now, let's talk a about you:

your university course of study

your experience in video making or GIS software

your thesis' topic or personal academic interests