



## **GEM – Green Education in Media / Course 2025**

### **Course Theme:**

#### **‘Listen to the waters’: Water and Biodiversity**

Reducing energy consumption - Augmenting human perception

As part of the GEM Erasmus+ Cooperation Partnership Project, the third course will take place at the Evripos Campus of the National and Kapodistrian University of Athens located on Evia island, Greece. The course will focus on the following themes:

- biodiversity in relation to aquatic ecosystems and natural water resources
- digital art within natural settings
- diverse media and technologies, with emphasis on sound and radio
- reducing energy consumption for digital art production and presentation

To support the above-mentioned themes, students will be introduced to the essentials on Augmented Reality (AR), Interactive Art, Sound and Radio Art during the pre-workshop presentations as well as during the workshop.

The schedule of the course is outlined below:



<b>7.05. – 28.05.2025</b>		<b>Preparatory Sessions with weekly online workshops</b>
<b>Meeting-Link:</b> <a href="https://filmuniversitaet-de.zoom-x.de/j/61648516721">https://filmuniversitaet-de.zoom-x.de/j/61648516721</a>		
<b>Meeting-ID: 616 4851 6721</b>		
<b>Estimated total workload for the precourse: 2 ECTS</b>		
7-5-2025   16:00 -18:00 (CET)	Workshop 1: - Introduction of the project, course tutors, participants and of the course objectives, structure and content - Interactive Art in Nature: A. Kontogeorgakopoulos, D. Charitos	
14-5-2025   16:00 -18:00 (CET)	Workshop 2: - Water Biodiversity: N. Papageorgiou - Low energy devices and renewable energy sources for outdoor installations: E. Tsampasis, Y. Dedes	
21-5-2025   16:00 -18:00 (CET)	Workshop 3: - Introduction to Radio technologies & the Out of Office Radio Project: A. Hadziselimovic, J. Prevett - Sound Art in nature: O. Karamanlis	
28-5-2025   16:00 -18:00 (CET)	Workshop 4: - Augmented Reality & Geo-Located Art in Nature and Public Spaces: C. Antonopoulou, C. Rizopoulos	
<b>01.06. – 06.6.2025 “Listen to the waters” Camp, Evia island (Greece)</b>		
<b>Estimated Workload: 2 ECTS</b>		
1-6-2025   evening	Get Together, Intro & Team Building Sessions	
2-6-2025   10:00-17:00	Inspirational discussion, project work (challenge introduction), commuting to sites in nature, welcome evening.	
3-6-2025   10:00-17:00	Co-Creation, ideation, sketching, exploring the design options of concepts.	
4-6-2025   10:00-17:00	Development of prototypes (& radio programmes)	
5-6-2025   10:00-14:00 15:00 – 19:00   19:00-23:00	Presentation preparation Presentations of camp results from all groups Evening broadcast of radio programmes and Farewell PARTY !!!!!	
6-6-2025   noon Afternoon-evening:	Departure Curriculum workshop	
7-6-2025   10:00-12:00	Consortium Meeting: Curriculum workshop	

**ECTS:** The amount of ECTS granted for this course is subject to the individual implementation of the partner universities.



### Course Concept

The climate crisis has profound and multifaceted impact on water resources globally, manifested either as water scarcity in some cases, or water excess in others. Global warming leads to prolonged droughts, more frequent and severe heat waves, and more intense wildfires. On the other hand, it accelerates polar ice melting, contributing to rising sea levels and increased flooding at coastal areas. Moreover higher rates of evaporation, alter precipitation patterns and increase moisture in the atmosphere, leading to more intense rainfalls that cause local floods.

Digital technologies have a significant environmental footprint. Although digital media are largely perceived as immaterial, their operation presupposes a physical infrastructure that consumes natural resources and deteriorates the environment. In this course we will explore how we can reduce the energy consumption of digital media production. We will use digital media in a more sustainable way to create narratives that raise environmental awareness and enhance human perception of global water resources and biodiversity. We will adopt low energy solutions (e.g. microcontrollers) that can be powered by renewable energy sources, such as solar panels.

We will use diverse media and technologies, emphasizing the use of audio by designing sound-based experiences in nature, creating location-based narratives (e.g. sound walks and augmented reality artworks), creating interactive artworks in natural settings, recording audio in nature and using radio technologies (e.g. radio transmitters). Our goal is to enhance human perception of biodiversity. We will focus on species that live in aquatic ecosystems including sea, lakes, and wetlands and try to capture their activity (e.g. using hydrophones to capture underwater sound). We will also explore species that are affected by water scarcity, such as drought resistant plants.

We will investigate methods, practices and techniques for creating new media narratives and experiences on global water resources and biodiversity, that (where possible) will be respectfully embedded within natural environments.

### Overview of module

In this module, 9 partner organisations including around 40 students and 20 lecturers will collaborate on creating narratives and experiences on global water resources and biodiversity, using various media, such as locative media, Augmented Reality (AR), audiowalks, interactive art installations, audio and radio technologies. We will explore the opportunities of low energy-consumption technologies and audio to create a more sustainable future, on the backdrop of Greek nature and scenery in a multicultural setting. Through a well-balanced division between free time and studying, we aim to create an exciting intercultural learning experience for all participants of the workshop!

Our major topics will focus on Biodiversity and Waters (referring to global water resources and aquatic ecosystems). We will approach these topics using different media emphasizing the use of audio and low energy computing. As a result of this module, we will create new media narratives and experiences related to the course's concept.

During the **first two preparatory workshops** participants will get familiar with the project, its goals and the terminology used in the GEM courses. They will be introduced in interesting case studies, such as interactive artworks in nature. They will also learn about useful tools, such as low energy devices and renewable energy sources. Finally, they will be introduced in the concept of Biodiversity.

In the **following two prep workshops** participants will further learn about some of the media and



technologies that will be used during the “Listen to the Waters” Camp. More concretely, they will learn about Sound Art and Radio technologies and they will be presented with the Out of Office Radio Project. They will also learn about artistic projects using Augmented Reality (AR) and locative media in nature and public spaces.

In the “**Listen to the Waters**” Camp (01.06.25 – 06.06.25) local groups from Croatia, Germany, Greece, Finland, Malta and Poland will get together in a one-week camp on Evia island (Greece). There we will have nature experiences and explorations and visit interesting locations on Evia island. Furthermore, partakers will form groups of approx 6-7 participants to collaborate into one of the course’s topics .

**GROUPS:**

<b>“Listen to the waters” - Water and Biodiversity course structure into groups</b>		
	<b>Theme title</b>	<b>Tutors</b>
<b>1</b>	<b>Interactive art in nature</b>	Dimitris Charitos, Alexandros Kontogeorgakopoulos, Björn Stockleben
<b>2</b>	<b>Augmenting Nature: AR walks in natural ecosystems</b>	Caterina Antonopoulou, Haris Rizopoulos, Malgosia Kotlinska, Monica Hapek
<b>3</b>	<b>Radio Water (Bio-Diversity)</b>	Jim Prevett
<b>4</b>	<b>Radio Fire (Bio-Diversity)</b>	Adnan Hadzi, Malgosia Kotlinska
<b>5</b>	<b>Art for Futures Lab, Site-specific Ritual Theatre Performance/s</b>	Nicole Loeser, Angelica Böhm
<b>6</b>	<b>Water ecosystems: investigating the essence and the information that water carries</b>	Nafsika Papageorgiou, Dimitris Delinikolas, Orestis Karamanlis, Dimitris Charitos

**Consulting tutors on green energy use:** Lefteris Tsampasis, Yannis Dedes

All participants in this module will get a briefing before the preparatory workshops are started.

**About the location**

The “Listen to the Waters” workshop will take place on Evia Island, at several locations around the Evripos University Campus of the National and Kapodistrian University of Athens, located in Pachna town. Evia is Greece's second-largest island, approximately 1.5 hours driving distance



from Athens. The island is located on the eastern coast of Central Greece and is connected to the mainland by two bridges. Evia is a place of natural beauty and diverse landscapes, with a lot of places of interest including beaches, mountains and other natural attractions, archeological and cultural sites, traditional villages and towns.

Evia is strictly connected with the theme of the “Listen to the Waters” workshop. In recent years, the island has been severely impacted by climate change. In August 2021 Northern Evia suffered catastrophic wildfires which destroyed more than 50000 hectares of forest, as a result of prolonged heatwaves and drought. The loss of forest cover increased the risk of soil erosion, flooding, and biodiversity loss and resulted in major post-fire floods.

Evia island's unique characteristics make it a perfect location for both critical and creative reflection, as well as recreational and exploratory activities.

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## Platform and Support

- 1-4 mentors are assigned for each team of approx. 6-7 students
- Work on online whiteboards and video meeting tools during prep workshops
- Communication platform will be used during prep workshops
- Dedicated learning & research materials will be available online
- Prep workshops and camp sessions will be facilitated by an international teaching team

## Competencies taught in the Course

### Knowledge

- Augmented reality
- Locative media
- Interactive interfaces for artistic projects
- Radio technologies
- Low-energy technologies
- Using renewable energy sources
- Sustainability concepts, Sustainable Design
- Biodiversity
- Working with audio (recording & processing)

### Skills

- Rapid content & interface prototyping
- Concept and project planning for (interactive) projects
- Pitching and reviewing a concept
- Future skills

### Social Competencies

- Building a transcultural team
- Working in an interdisciplinary team
- Creative processes and decision making
- Self-reliance and empowerment
- Self-organisation within teams

### Sustainability Competences

- Embodying sustainability values



- Valuing sustainability
- Supporting fairness
- Promoting nature
- Embracing complexity in sustainability
  - Systems thinking
  - Critical thinking
  - Problem framing
- Envisioning sustainable futures
  - Futures literacy
  - Adaptability
  - Exploratory thinking
- Acting for sustainability
  - Political agency
  - Collective action
  - Individual initiative

### **Tentative tasks of teams during course**

- International teambuilding and leadership
- Research and ideate based on a briefing
- Concept development

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### **About GEM**

GEM - Green Education in Media is an Erasmus+ Cooperation Partnership between nine international partners (2022 - 2025):

- Film University Babelsberg KONRAD WOLF, Germany (Project Lead)
- Tampere University, Finland
- Tampere University of Applied Sciences, Finland
- National and Kapodistrian University of Athens, Greece
- University of Malta, Malta
- Academy of Dramatic Art, University of Zagreb, Croatia
- Jagiellonian University in Kraków, Poland
- Lodz Film School, Poland
- Institute for Art and Innovation, Germany

Together they are working on:

- Environment and fight against climate change
- Supporting digital and green capabilities of the higher education sector
- Green skills
- Creating new, innovative or joint curricula or courses
- Digital content, technologies and practices

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