



GEM – Green Education in Media / Course 2024

Course Theme: Seeing the Green - Data Storytelling for Sustainable Development

As part of the GEM Erasmus+ Cooperation Partnership Project

This course aims to provide the student with essentials on information visualisation and how different visualisation techniques can be used to deliver narratives in an effective and easily understandable way.

01.05. – 25.05.2024		Preparatory Sessions with weekly online workshops
Meeting-Link: https://filmuniversitaet-de.zoom-x.de/j/61648516721		
Estimated total workload for the precourse: 1 ECTS		
Thursday 02.05. 15:00 – 17:30 CET	Workshop 1: Introduction of the project and each other / Terminology / Showcases / Tools	
Monday 06.05. 15:00 - 17:30 CET	Workshop 2: Introduction to information visualisation	
Tuesday 14.05. 15:00 - 17:30 CET	Workshop 3: Interactive visualisations	
Wednesday 22.05. 15:00 - 17:30 CET	Workshop 4: Advanced, Experimental and Accessible visualisations: XR etc.	
26.05. – 31.5.2024 “Seeing the Green” Data Storytelling Camp, Tampere (Finland) Estimated Workload: 2 ECTS		
26.05. Arrival 17:00	Get Together, Intro & Team Building Sessions	
27.05. 9:00 – 18:00	Inspirational nature walk, project work (challenge introduction), welcome evening.	
28.05. 9:00 – 18:00	Co-Creation, ideation, sketching, exploring the design options of concepts.	
29.05. 9:00 – 18:00	Development of prototypes	
30.05. 9:00 – 18:00 19:00 –	Presentation preparation and presentations of camp results Farewell evening	
31.05. 10:00 – ...	Departure	

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



Data Narration as Macroscopes of Planetary-Scale Computation

The 21st century is marked by a paradox: the global sensing systems that enable us to recognize the climate catastrophe are the same systems that contribute to global warming. Planetary-scale computation both raises awareness and exacerbates the problem. The narration and aestheticization of data—whether as graphics, sounds, text, or moving images—sit at the intersection of the world's datafication and humanity's understanding of the process. Data representations possess the power to convey narratives that are otherwise unimaginable.

Microscopes allow us to visualise processes too minute to be observed, while telescopes capture distant galaxies far beyond human reach. In this context, data representations can serve as macroscopes, illuminating complex, global, and otherwise unrepresentable aspects of our world.

The 2024 edition of "Green Education in Media" will emphasise the food and land usage of the future. In this realm, scientific data offers insights into the future, made possible by the planetary-scale computation of global sensing systems, insights that would otherwise remain elusive. Narrating such data is a pivotal skill in the data-driven landscape of the 21st century. This skill is the central theme of "Data Storytelling for Sustainable Development."

Overview of module

In this module, 9 partner organisations including around 40 students and 20 lecturers will collaborate to tell visual stories on environmental data. We will explore the opportunities of data storytelling and information visualisation to create a more sustainable future, on the backdrop of Finnish 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 topic will focus on Data Storytelling (e.g. *interactive data storytelling and visualisations, infographics, and visualising information in virtual and augmented reality.*)

The subtopic will be agriculture and nutrition of the future. Various datasets are available on this topic.

As a result of this module, visions of ideal places are researched, envisioned and described. Our focus will be on solutions, but there is also plenty of space for theorising and conceptualising.

In the **first two preparatory workshops** (02.05/ 09.05.) participants will learn about essentials of information visualisations.

The **following two prep workshops** (14.05./ 22.05.) will explore more advanced visualisation techniques. We will also study how interactive visualisations can be tools of exploration for the one who is using the visualisation.

In the **Information Visualization Camp (25.05. – 31.05.)** local groups from Croatia, Germany, Greece, Finland, Malta and Poland will get together in a one-week camp near Tampere. There we will have nature experiences and explorations and enjoy traditional Finnish sauna and swimming by the Pyhäjärvi lake. Furthermore, partakers will form groups of 4 people to collaborate and do a deep dive into the world of information visualisation.

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

About the location (<https://varala.fi/en/>)

Varala is a leading sports education institute, a training facility and a versatile centre for sports, leisure and recreational activities. Varala Sports Institute is an official education provider in the field of physical education and sports with an authorization to provide education



and award qualifications granted by the Finnish Ministry of Education and Culture.

One of the pioneers of Finnish sports institutes, Varala, founded in Tampere in 1909, is a significant part of the history of sports in Finland. The oldest sports institute in Finland was originally established to promote physical education for women working in local factories through gymnastics. We at Varala want to be involved in creating a future where everyone can enjoy exercise or sports, achieve their goals and feel good, regardless of their age and background, both in their free time, at work and on the playing field. Varala was founded by energetic and courageous women who were ahead of their time. They firmly believed that one day the importance of physical activity would be understood and recognized.

Today, Varala continues to lead the way as a high performance training center for sports. Varala also offers excellent leisure & camp offerings, well-being, meetings & wellness days for companies and groups, as well as sports and coaching activities.

Address: Varalankatu 36, Tampere, Finland.

Platform and Support

- 1-2 mentors are assigned for each team of up to 4 students
- Work on online whiteboards and video meeting tools during prep workshops
- Communication platform tbd
- 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
 - Foundations of data visualisation (Gestalt Theory, Perception)
 - Mapping data to graphics
 - Using standard tools for data visualisation
 - Knowledge about possibilities of data visualisation in moving images
 - Different approaches to data visualisation: Human Computer Interaction, Information Design, Artistic approaches
 - Data visualisation in XR (tentative)
- Skills
 - Critical reflection of data visualisation
 - Customised data visualisations with coding frameworks (advanced skill for people with prior experience)
 - Rapid content & interface prototyping
 - Concept and project planning for (interactive) projects
 - Pitching and reviewing a concept
 - Exploring the creative potential of information visualisation technologies
 - 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
- Futures Literacy

Tentative tasks of teams during course

- International Teambuilding and Leadership
- Research and ideate based on a briefing
- Concept Development

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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