



GEM – Course Concept and Experience Report

Sustainable Futures Camp based on Art For Futures Lab



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Sustainable Futures Camp based on Art For Futures Lab

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COURSE CONCEPT

Abstract

The Sustainable Futures Camp held from June 4th to June 10th, 2023, aimed to envision positive sustainable scenarios for the year 2050 based on existing innovations and translate them into new media formats. The course focused on understanding sustainability challenges, particularly related to climate change, and the role of digitization in shaping our future. The camp brought together around 60 participants from eight European higher education institutions. It emphasised interdisciplinary collaboration, enabling students with diverse backgrounds to contribute their expertise.

The camp began with four weekly preparatory workshops during May, introducing students to sustainability concepts and co-creation methods, using the Miro platform. During the camp, students were divided into eight groups, each guided by educators.

The first day offered nature walks and team-building activities providing a non-hierarchical atmosphere and time to get to know each other. On the second day students engaged in the Art for Futures Lab workshop, envisioning sustainable futures for 2050 using innovative approaches. On the third- and fourth-day design sprints were conducted to develop ideas and refine prototypes of new media formats that promote sustainability and desirable futures. Students brainstormed solutions to key global challenges, including climate change, with expert presentations on climate change, data visualisation, animation and VR providing valuable knowledge and insights. The final presentations in the afternoon of the fourth day showcased innovative media formats, including prototypes for VR games, 3D games, XR experiences and short films, Sustainability and social impact were key considerations. The camp leveraged various technologies. Learner support was a priority, with tutors assisting students in understanding tasks and overcoming language barriers.

Feedback from students highlighted the success of the camp, praising its organisation and the effectiveness of the methods used. Some suggested that a more balanced approach to sustainability in student activities would be beneficial. Overall, the camp achieved its goal of inspiring students to create new media formats that promote sustainability and positive futures for 2050, and in parallel reflecting on green media production. The Sustainable Futures Camp demonstrated the power of interdisciplinary collaboration and innovative media formats in addressing climate change and sustainability challenges, offering a glimpse into a greener, more optimistic future.

Course Description

Course Goal

The goal of the course is to envision positive sustainable scenarios for the year 2050 based on existing innovations. These scenarios should be transported in the conception and prototyping of new media formats and targeting specific audiences to be presented at the end of the workshop.

Course Overview

This course aims to understand the current sustainability challenges related to climate change and our coexistence with nature. It deals with the uncertainty facing planetary boundaries - in relation to specific target groups and multipliers of individuals, organisations and societies.

In this module, 9 partner organisations incl. about 40 students and 20 lecturers have joined. We aimed to focus on positive scenarios in order to reflect and change current

lifestyles, normative values and contemporary culture of the Anthropocene. Our major topic was focused on Green Transformation in Media and Arts.

As a result of this module, visions of ideal future scenarios were researched, envisioned and described as well as appropriate media formats are conceptualised to transfer these ideas to accelerate green transformation forwards positive futures. These serve as visions or missions conveying intentions and values of the teams, in search of addressing issues causing climate change.

Problem Description

Digitization is the driving force in the early 21st century, causing multidimensional changes in society and challenging traditional economic systems. Internet and cloud computing have contributed to the emergence of new global interaction formats and enable access to and exchange of information and knowledge at any time. Virtual storage, media as well as hardware and software have become extremely cheap in recent years, which has led to an immense spread of information, rapid data processing, but also extensive use of natural resources. In the digital age, digital technologies ensure flexible data and knowledge transfer through networked digital communication channels. On the other hand, innovative IT and data management systems are constantly developing new application options. The added value is based on the linking of software with hardware, with which e.g. economic systems such as the circular economy can be implemented (Scott 2015). In ecosystems that are becoming more and more complex, the digital aggregation of information and the intelligent integration of value-added elements can bring about important solution impulses for sustainability concepts in the areas of conflict (Gerten & Schellnhuber 2015. Planetary Boundaries).

Although millions of people around the world are demanding climate protection and sustainability, the speed of the necessary adaptation and mitigation is completely inadequate. Many people recognize that planetary boundaries, the climate and biodiversity crisis, the unregulated globalised financial system, and the increasingly unequal distribution of wealth that endangers peace as a whole posing a problem for human societies. They are ready to question the world and critically reflect the way they have lived up to now, and search for solutions. At the same time, however, existing solutions seem partly unknown, unclear or contradictory or difficult to imagine. Climate change is proven to be the most urgent and consequential issue humankind has ever faced.

How content producers address it in the next two decades might determine the kind of world current and future generations will live in. In the book “The Future We Choose” by Christiana Figueres and Tom Rivett-Carnac (they led negotiations for the UN’s Paris Agreement of 2015) two possible scenarios for planet Earth are outlined. One describes what life on Earth will be like by 2050 if Paris climate targets will be failed. The other one refers to a carbon neutral, regenerative world, and how head-on optimism can fend off the occurring disasters.

Guiding Question

The question is: How can digital skills and competencies and the creation of digital and virtual worlds occurring as story-worlds in filmmaking, serial writing and games, virtual explorable worlds in XR and digital communities in social media design be utilised to reflect on the impact of digital technology on our natural environment?

Collaboration Mode

Collaboration is a cornerstone of the Sustainable Futures Camp (SFC), and it plays a pivotal role in achieving the course's goals. Throughout the camp, collaboration manifests at various levels, from students working within teams to international collaboration among partner organisations.

Interdisciplinary Student Teams

One of the most evident forms of collaboration in the SFC is the formation of interdisciplinary student teams. Students from different countries and with various specialisations, including film production, cultural management, media design, and film editing, come together to work on projects. This diversity ensures a rich exchange of ideas and skills.

Within these teams, students distribute tasks based on their capacities and interests. This allocation of responsibilities reflects the collaborative spirit, where each team member's strengths contribute to the collective work. For example, film students might handle video production, while media designers focus on interactive elements.

Collaboration at the student team level fosters a culture of mutual learning, with students sharing their expertise and learning from one another. This experience demonstrates the power of diversity in solving complex sustainability challenges.

Tutor Support and Facilitation

The role of tutors is not just instructional; it extends to facilitating collaboration. Tutors provide guidance and support, ensuring that teams are on track and addressing any issues that may arise.

Tutors act as mediators during team discussions, helping resolve conflicts and ensuring that every team member has a voice. They play a crucial role in maintaining a positive and inclusive team dynamic.

Tutors also encourage collaboration by connecting students with peers who possess complementary skills. For example, a film maker collaborates with a designer to create a more immersive and impactful project.

International Collaboration

The SFC goes beyond individual student teams, promoting international collaboration at a higher level. Partner organisations from various European higher education institutions collaborate to organise and execute the camp.

This international collaboration brings together students, lecturers, and experts from diverse cultural and educational backgrounds. It offers a unique opportunity for participants to learn from different perspectives and approaches to sustainability.

Expert sessions, which are part of the camp's curriculum, often feature guest speakers from various countries, enriching the discourse and providing a European perspective on sustainability challenges and solutions.

Cross-Cultural Learning

Collaboration in the SFC is not limited to academic or project-related activities. It extends to cross-cultural learning and bonding among participants.

Students from different countries share meals, engage in extracurricular activities such as nature walks and herbal tours, and work together on various tasks. These non-professional forms of collaboration help build relationships and foster cultural understanding.

Cross-cultural collaboration is not just a byproduct of the camp but is intentionally nurtured to create an inclusive and diverse learning environment.

Learning from Peers

An essential aspect of collaboration is the opportunity for students to learn from their peers. This happens not only within teams but also during presentations and feedback sessions.

Students listen to and critique the work of other teams, gaining insights into different approaches and creative solutions. The feedback process is educational and encourages critical thinking.

Digital Collaboration Tools

Collaboration in the digital age is facilitated by various tools and platforms. The SFC leverages technology for effective collaboration, with the Miro platform being a central tool for brainstorming and idea generation.

Communication platforms like Discord and Google Docs are used for general communication and sharing materials. These tools enable seamless collaboration, especially when participants are working remotely.

In summary, collaboration is woven into the fabric of the Sustainable Futures Camp, enhancing the learning experience and the quality of projects. Whether it's interdisciplinary student teams, international cooperation, cross-cultural interactions, or digital collaboration tools, the SFC demonstrates that addressing complex sustainability challenges is most effective when individuals come together, share their expertise, and work collectively and co-creatively toward a greener and more sustainable future.

Duration, Intensity & ECTS

Duration

The Sustainable Futures Camp (SFC) is designed as an immersive and intensive learning experience that spans over a specific duration. The combination of the camp's duration and intensity plays a crucial role in achieving its educational objectives and fostering a transformative learning experience. The SFC typically spans five days. This condensed time frame is carefully planned to maximise the impact of the camp.

Prior to the main camp, there is a preparatory phase of one month, consisting of four sessions, each lasting 2.5 hours. While not as extensive as the main camp, these workshops serve as a foundation for the students, providing them with essential knowledge and skills.

Intensity

Concentration of Activities

The one-week duration of the main camp condenses a significant amount of learning activities and experiences into a short timeframe. This concentration of activities ensures that students are fully engaged and immersed in the learning process throughout the week.

Interdisciplinary Collaboration

The intensity of the SFC is heightened by the interdisciplinary nature of the teams and the collaborative projects. Students with diverse backgrounds must quickly adapt to working together, sharing their expertise, and collaborating effectively to produce meaningful outcomes.

Expert Sessions and Workshops

The camp includes expert sessions and workshops on various sustainability-related topics, including climate change, data visualisation, animation, VR development, and transmedia storytelling. These sessions are designed to be information-rich and require

students' full engagement to grasp the concepts and apply them to their projects.

Nature Walks and Team Activities

In addition to academic and project-related activities, the SFC incorporates nature walks and team-building exercises. These activities add a layer of intensity by challenging students physically and mentally while fostering team cohesion.

Design Sprints

The design sprints, which are part of the camp, require students to rapidly ideate, prototype, and refine their projects within a limited timeframe. This intensity encourages creative thinking, problem-solving, and quick decision-making.

Presentations and Feedback

Students are expected to present their projects multiple times during the camp, including mid-pitch and final presentations. These presentations demand preparation, critical thinking, and the ability to articulate ideas effectively, adding to the overall intensity.

Cross-Cultural Learning

The SFC's international and cross-cultural dimension intensifies the learning experience. Students are exposed to different cultural perspectives and must adapt to working in a diverse and inclusive environment, enhancing their cultural competence.

Digital Collaboration

The use of digital collaboration tools like Miro, Discord, and Google Docs intensifies the pace of work and communication. These tools enable efficient collaboration but also require students to navigate technology effectively.

Overall, the combination of timeframe and the intensity of activities in the Sustainable Futures Camp is intentional. It creates an environment where students are fully engaged, challenged, and motivated to explore, learn, and collaborate intensely. This immersive approach is designed to foster transformative learning, equipping students with the knowledge, skills, and mindset needed to address complex sustainability challenges effectively.

ECTS

The amount of ECTS granted for this course is subject to the individual implementation of the universities. The number of credits can be e.g. from three to five. For example, the preparatory sessions could provide one to two credits and camp two credits for the students. If the students work with the individual project or take some other additional responsibilities in the course, that might provide them e.g. one extra credit.

Platforms

The Sustainable Futures Camp (SFC) leverages a variety of platforms and web applications to facilitate communication, collaboration, and the overall learning experience. These digital tools play a crucial role in the success of the camp. Here are some of the key platforms and applications to be used:

Miro is a digital whiteboard and collaboration platform. It is a central tool used in the camp for brainstorming, idea generation, and visualising concepts. Students and teams can collaborate in real time, making it an ideal platform for creative and design-related tasks. Apart from general use, designed Miro boards are used specifically for workshops, including the Art for Futures Lab method. These boards facilitate collaborative activities and visual thinking during the workshops.

Discord is a communication platform that combines voice, video, and text chat. It was used for general communication among camp participants, including students, tutors, and organisers. Discord provided a space for discussions, announcements, and informal interactions.

Google Docs is used for creating, sharing, and collaborating on documents. It serves as a platform for storing and sharing learning materials, instructions, and resources related to the camp's curriculum.

Google Drive complements Google Docs by providing cloud storage for various files, including presentations, images, and videos. It ensures easy access to important camp-related content.

WhatsApp, a popular messaging app, is utilised for communication among teams and individuals. It allows students to stay connected and exchange messages, updates, and files.

Virtual Reality (VR) headsets are part of the equipment brought to the camp. While not a web application, VR headsets are used for immersive experiences and prototyping VR-related projects.

Augmented Reality (AR) technology is likely used for immersive experiences and projects.

Presentation Tools such as Powerpoint and Canva were used for creating online presentations.

ChatGPT (a text-based AI) is used for formulating and shortening text content for certain tasks, possibly aiding in content creation and communication.

These digital platforms and tools are instrumental in enabling hybrid collaboration, sharing of resources, and the execution of various activities during the Sustainable Futures Camp. They help create a dynamic and efficient learning environment for the participants, allowing them to work together effectively despite geographical and disciplinary differences, especially in the preparatory workshops.

Methods

In this section the methods and ways of learning, working and collaborating in the course are described. The Experience Report section addresses how these methods were implemented during the course.

The concept of the Sustainable Futures Camp is based on the **Art For Futures Lab** workshop methodology (that has been developed since 2020 by Nicole Loeser/ Institute for Art and Innovation Berlin, Germany and Prof. Angelica Böhm/ Film University Babelsberg, Germany) using modified methods based on worldbuilding, design thinking, speculative design, regnosis/backcasting and future prototyping, which invites its participants in particular to help shape positive future visions.

Here are some of the methods used in the Art For Futures Lab:

Collaborative Workshops involve group activities and exercises designed to encourage teamwork, idea generation, and shared problem-solving. These workshops likely promoted collaboration among students and tutors.

The concept of **Worldbuilding** has been around for centuries used in various forms of storytelling, such as in mythology and epic literature. However, the term "worldbuilding" was popularised by science fiction and fantasy authors in the 20th century.

The Worldbuilding Institute (WBI Los Angeles/USA) provides resources and training for creators offering a variety of methods and approaches to worldbuilding, the most prominent is the "bottom-up" method. It involves starting with small details and building up to larger structures and systems. Worldbuilding involves creating fictional or speculative worlds, allowing participants to imagine and explore alternative realities and futures.

Design Thinking has evolved over time and been influenced by many designers and thinkers. One of the pioneers was the industrial designer and educator, Richard Buchanan, who first introduced the term "Design Thinking" in 1992. Design thinking is a human-centred approach to problem-solving that emphasises empathy, ideation, and prototyping. It encourages participants to understand the needs of end-users and create innovative solutions. Design thinking likely played a role in shaping project ideas during the camp.

Design Sprints are time-bound, structured workshops that encourage rapid ideation and prototyping. They are often used to solve complex problems and generate innovative solutions or are employed to guide students in refining their project concepts. Designing, prototyping, and testing ideas with users are typical phases of Design Sprint. See more information here: <https://designsprintkit.withgoogle.com>

Prototyping is a hands-on method that involves creating tangible representations of ideas. Students are engaged in prototype development to bring their sustainable media formats to life, even if they were not final products.

Regnosis/Backcasting is often used in sustainability and environmental planning, as well as in business and strategic planning. It is a planning and decision-making methodology that involves starting with a desired future scenario or goal and working backward to determine the steps and actions needed to achieve that vision/goal. This process also can help to identify potential obstacles or challenges and to develop strategies to overcome them.

Future Prototyping is a design methodology that involves creating prototypes of products, services, and anticipating experiences that are not yet available, with the aim of exploring potential future scenarios and identifying new opportunities for innovation.

Furthermore, the course integrated **Speculative Design**. This design practice involves creating design concepts, products, or services that are intended to provoke discussion, debate, and reflection on potential future scenarios, social and cultural issues, and technological developments. Using imagination and critical thinking to explore possible futures it allows questioning and challenging current norms and assumptions. Speculative design is concerned with asking questions and opening up new possibilities involving the use of storytelling, visualisation, and other narrative techniques to create scenarios that are engaging and thought-provoking.

Futures Literacy is the ability to understand and engage with different possible futures. It encourages critical thinking about the future and the exploration of various scenarios.

This approach likely informed discussions about sustainability and future-oriented projects.

Additionally, the following methods are integrated to provide a more holistic approach for the development of new media formats reflecting on green media production, sustainability, new media conception and social impact strategies:

Cross-Cultural Collaboration among students from different countries and cultural backgrounds can be considered a method in itself. The diverse composition of teams likely encouraged cross-cultural learning and the exchange of ideas.

Expert presentations involve inviting professionals or subject matter experts to share their knowledge and insights with participants. In the context of the camp, experts likely presented on topics such as climate change, data visualisation, and storytelling.

Storytelling techniques, such as narrative development and storytelling frameworks, may have been used to help students craft compelling narratives for their projects. Effective storytelling is essential for conveying the impact of sustainability initiatives.

Throughout the camp, students are expected to participate in **Presentation and Feedback Sessions**. This iterative process of presenting and refining project concepts is a common method for developing innovative solutions.

These methods and approaches are strategically integrated into the SFC to create a rich and dynamic learning environment. They aimed to empower students to think critically about sustainability challenges, explore innovative solutions, and envision positive futures that could be conveyed through their media formats and prototypes.

Other methods such as the following serve the holistic approach of the camp:

Herbal Tours and Nature Walks are experiential learning activities that involve exploring natural environments. These walks are likely used to connect participants with nature, stimulate creativity, and inspire sustainable project ideas. They are opportunities for students to (re)connect to nature. They can be used to allow nature-based inspiration based on different mindfulness instructions as well as guidelines to document the walk by representations of such as drawings, photos, videos, 3D photography and small installations to capture natural elements further to be used in the digital domain, e.g. for an exhibition. Inspired by nature walks within a virtual reality platform, representations and compositions are created for establishing a space for virtual walks and conducting the virtual walk session.

Intended Outputs

The Sustainable Futures Camp (SFC) intends outputs that are designed to align with the camp's overarching goals of exploring sustainability challenges, envisioning positive futures, and developing media formats to communicate these visions. The intended outputs include:

Positive Future Scenarios

The primary output of the camp is for students to develop and articulate positive future scenarios for the year 2050. These scenarios are expected to be creative, innovative, and optimistic visions of a sustainable world. They should address specific sustainability challenges related to climate change, biodiversity, and other pressing issues.

Concept Visualisations

Students are encouraged to create concept visualisations of their positive future scenarios. These visual representations are meant to help the target audience understand and feel the circumstances of the envisioned future. Visuals, whether in the form of concept art, storyboards, or other media formats, play a crucial role in conveying the essence of the scenarios.

Impact Consideration

In addition to envisioning the future, students are asked to consider the potential impact of their output on current society. They need to think about how their work could influence people's behaviour, mindset, or understanding of sustainability issues. This consideration aims to ensure that the outputs have a real-world relevance and a call to action.

Media Format Prototypes

Depending on the skills and interests of the students and their teams, the camp allows for flexibility in the choice of new media formats. The intended outputs include prototypes for various media formats, which can range from hypothetical devices, applications, or services to animated storyboards, concept art, 3D or mixed-reality environments, and digital composites of audiovisual assets. The prototypes are not expected to be final products but rather proof-of-concept representations.

Holistic Experience

The outputs are intended to provide a holistic and immersive experience for the target audience. Students are encouraged to engage all the senses to make the experience as vivid and impactful as possible. This holistic approach aspires to fully immerse the audience in the anticipated or speculative future scenario.

Strategy for Change

Alongside the media formats and scenarios, students are asked to develop a strategy for how they would like to influence people's behaviour, mindset, or understanding. This strategic component ensures that the outputs are not only creative but also have a practical and actionable dimension.

Presentation and Communication

Part of the intended outputs involve the presentation and communication of the developed scenarios and media formats. Students are expected to effectively convey their visions and strategies to their peers, tutors, and potentially a broader audience.

Interdisciplinary Collaboration

An implicit output of the camp is the fostering of interdisciplinary collaboration and learning among students from various backgrounds. The camp encourages participants to collaborate across disciplines to address complex sustainability challenges.

Overall, the outputs of the SFC are designed to be both imaginative and impactful, aiming to inspire positive change in the way people think about and engage with sustainability issues. These outputs can serve as visions, missions, and tools for addressing climate change and other pressing global challenges.

Content

The output should be a positive future scenario in the form of an experienceable concept visualisation. The target audience should understand and feel the circumstances of the anticipated future that have been imagined. Students should think about the impact their output will provide in the current society and present a strategy on how they would like to get people to change their behaviour, mindset or understanding. Depending on the skills and the interests of the students, this may be a prototype for a hypothetical device, application or service, an animated storyboard, a concept art, a prototype for a 3D or mixed-reality environment, a series of digital composites of audiovisual assets that might help communicate their fictional scenario. There are actually no limits here, as long as they can transport their vision to the recipients. They are encouraged to think of all the senses to make the experience holistic and to fully immerse their audience in their anticipated/speculative future scenario.

Production

Students are stimulated to imagine and explore how sustainable media technology might work in the future. They are free to explore topics around the interdependency on natural resources, i.e. conserving/ regenerating natural environments, innovative food production, circular societies, and utilise whatever tools and practices they think and feel are most suitable. Depending on the needs of their new media format ideas tutors provide guidance on appropriate production methods. The amount and effort in actual media production should be critically reflected according to green production. The goal of the SFC is the creation of a prototype, not a full and final product.

Competencies

The Sustainable Futures Camp (SFC) incorporates a range of competencies and skills into its curriculum, fostering a holistic learning experience for participants. Students are encouraged to think laterally, experimenting with a variety of media practice skills and discovery-based learning methods. of new media technologies.

Media Practice Skills and New Media Technologies

The SFC encourages participants to experiment with various media practice skills and new media technologies. Students had the opportunity to develop prototypes for media formats, which might include virtual reality, augmented reality, interactive applications, and more. This hands-on experience allowed them to gain practical skills in using these technologies.

Visioning Skills

Visioning skills are a core component of the SFC. Students are tasked with crafting imaginative and inspiring scenarios for a sustainable future. This process involves creative thinking, imagination, and the ability to communicate a compelling vision.

Future Skills

Future skills, such as foresight and futures literacy, are central to the camp's objectives. Participants are challenged to envision positive futures for 2050, which require them to think critically about the long-term implications of their ideas and actions. Futures literacy is a skill that students develop as they explore possible future scenarios, analyse emerging trends, and consider the implications of their ideas on future societies.

Future Prototyping

Futuristic prototyping is an integral part of the camp. Students are expected to create prototypes for media formats that can transfer future narratives. This involved thinking about how emerging technologies could be harnessed to convey their visions effectively.

Multimodal Design Skills

Multimodal design skills were developed as students worked on a variety of media formats, including visual, auditory, interactive, and immersive elements. They learned to convey ideas through multiple modes of communication, making their narratives more engaging and impactful.

Storytelling

Storytelling is a fundamental skill addressed in the SFC. Participants need to craft narratives that convey their positive future scenarios effectively. Storytelling techniques are employed to make the scenarios relatable and engaging for the audience.

Social Competencies

Building and working in **transcultural and international collaboration** are central to the SFC. Students from different countries and cultural backgrounds collaborate on projects, fostering cross-cultural understanding and teamwork.

Working in an interdisciplinary team is a key aspect of the camp. Students with diverse backgrounds and expertise come together to address complex sustainability challenges, encouraging interdisciplinary collaboration.

Creative processes and decision-making are emphasised throughout the camp. Participants engaged in brainstorming sessions, design sprints, and creative workshops to develop their ideas and make decisions collectively.

Self-reliance and empowerment are encouraged as students can take ownership of their projects. They are empowered to envision and prototype their ideas, taking responsibility for the creative process.

Self-organisation within teams is vital for project success. Teams distribute tasks, allocate responsibilities, and coordinate their efforts to achieve their goals effectively.

Tentative tasks of teams during course consist of the following:

- **International Teambuilding and Leadership**
Students engage in international team-building activities, fostering collaboration and leadership skills. They learn to work effectively with peers from different cultural backgrounds.
- **Research and Ideation based on a briefing**
Students conduct research on sustainability challenges and use this knowledge to ideate and develop their positive future scenarios. This process encourages critical thinking and problem-solving.
- **Concept Development**
The SFC includes workshops on concept development, where students refine their ideas and transform them into actionable concepts for media formats.
- **Design Sprint Method**
The design sprint method is used to facilitate rapid ideation and prototyping. Students learn how to structure and conduct design sprints to generate innovative solutions.

- **Prototype and Test an (Interactive) / Participative Media Format**

Participants gain hands-on experience in prototyping media formats. They learn how to create prototypes and test their functionality, ensuring that their concepts could be realised effectively.

In summary, the AFFL-SFC provides a comprehensive learning experience that addresses a wide range of competencies, from technical and creative skills to social and collaborative abilities. Participants are encouraged to envision sustainable futures, develop innovative media formats, and work effectively in diverse and interdisciplinary teams.

Curriculum

Objectives

The course objectives may be divided into the core competencies and into the competencies that depend on the emphasis of the different implementations. The core competencies and objectives are:

- Knowing the basic terminology of sustainable design and climate change.
- Having tools for visioning the future scenarios.
- Ability to ideate and create content based on positive future storytelling.
- Rapid content and interface prototyping for (interactive) media formats.
- Pitching and reviewing media vision concept.
- Exploring the creative potential of new media technologies
- Collaborating in an international team.

The full list of competencies that the students can gain on the course, can be seen on the Competencies chapter.

Content

Preparatory Sessions: Definition of terms of current sustainability challenges related to climate change, existing potential solutions in business and politics, introduction to future prototyping and Art For Futures, introduction to nature walks and sustainable concepting, i.e. Planet as a personal exercise, rapid prototyping methods, camp preparations.

Sustainable Futures Camp: Introduction, teambuilding, nature walks, Art for Futures Lab, development of concepts and prototypes, expert lectures, reviews and presentations of concepts.

Goals

The course prepares the students to envision positive sustainable scenarios for the future based on existing innovations. These scenarios are then transported in new media formats and their concepts presented at the end of the workshop. To enhance the curriculum of the Sustainable Futures Camp (SFC) and the different implementations of the future Sustainable Futures Camps, tutors can consider incorporating the following elements to further enrich the learning experience and outcomes:

Diversity of Sustainability Topics

Expand the scope of sustainability topics explored during the camp. While climate change and biodiversity are crucial, introduce a broader range of sustainability challenges, such

as social equity, economic sustainability, and urban planning, to provide a more holistic understanding of the complex issues at hand.

Sustainable Camp Practices

Ensure that the camp itself follows sustainable practices, such as reducing waste, conserving energy, and minimising its environmental footprint. This serves as a practical example of sustainability in action. For example, the Sustainable Futures Camp provided only vegan food.

Sustainability in Media Production

Integrate sustainable practices into the media production process. Teach students about eco-friendly (so-called green) production techniques, resource-efficient equipment, and sustainable storytelling methods.

Global Perspective

Foster a stronger global perspective by involving experts and speakers from various regions. Diverse perspectives can offer unique insights into sustainability challenges and solutions from different parts of the world.

Real-World Case Studies

Introduce real-world case studies of successful sustainability initiatives and projects. Analyse these examples to inspire students and provide practical insights into how sustainable solutions are implemented.

Integration of Cultural Narratives

Encourage students to incorporate cultural narratives and indigenous knowledge into their positive future scenarios. This can lead to a more inclusive and culturally sensitive approach to envisioning sustainable futures.

Interactive Workshops: Incorporate more interactive workshops and hands-on activities throughout the camp. These activities can include sustainability challenges, simulation games, and practical exercises related to sustainability, media production, and storytelling.

Ethical Considerations

Include discussions on ethical considerations related to sustainability and media production. Address topics such as greenwashing, responsible storytelling, and the impact of media on public perception and behaviour.

Community Engagement

Promote community engagement by encouraging students to collaborate with local communities or organisations. This can involve conducting sustainability-related projects or workshops that benefit the community and provide students with practical experience.

Public Awareness Campaigns

Challenge students to develop public awareness campaigns based on their positive future scenarios. These campaigns can be used to reach a wider audience and inspire action on sustainability issues.

Impact Measurement

Teach students how to measure the impact of their media formats on society and the environment. Introduce key performance indicators (KPIs) and evaluation methods to assess the effectiveness of their projects.

Interdisciplinary Collaboration

Emphasise interdisciplinary collaboration by encouraging students from diverse academic backgrounds to work together on projects. This approach mirrors real-world sustainability challenges that require expertise from multiple fields.

Mentorship

Assign mentors or coaches to student teams. Experienced mentors can provide guidance, support, and industry insights, helping students refine their ideas and media formats.

Continuous Learning

Establish a framework for ongoing learning and networking beyond the camp. Encourage participants to stay connected, share updates on their projects, and continue collaborating on sustainability initiatives.

Evaluation and Feedback

Implement a robust evaluation and feedback system for the camp. Gather feedback from students, mentors, and guest speakers to continually improve the curriculum and overall experience.

By incorporating these elements into the curriculum, the Sustainable Futures Camp can offer a more comprehensive and impactful learning experience, empowering students to envision and create positive sustainable futures effectively.

Prerequisites

Basic knowledge of concept development and different professional roles in the media field.

Skills to work on digital productions and digital platforms.

Evaluation

The evaluation should be based on tutors' and students' feedback. The evaluation takes into account the background knowledge of students. It should include the work conducted during the course, the student's participation and involvement in the process and the final outcomes of the workshop, i.e., scenarios, new media formats and reports. Sustainability is portrayed in a meaningful and innovative way in course deliverables. Also, the overall collaboration and work conducted during the course's online and onsite meetings should be part of the evaluation.

EXPERIENCE REPORT

The experience report explicitly addresses how the course was implemented, i.e. what happened when the above plan was put into practice.

Sustainable Futures Camp: June, 4 – 10, 2023

Preparatory Workshops: May, 2- 30, 2023, 4 sessions á 2.5 hours

Course Overview and Introductions

The course commenced with a series of four preparatory workshops (May 2023) designed to acquaint participants with foundational sustainability concepts and terminologies. These preliminary online sessions served as a precursor to the forthcoming camp and provided students with the opportunity to familiarise themselves with the functionality of the Miro platform, the participants from 8 different universities and planned activities and methods. Subsequently, the camp convened in Germany, gathering about 70 attendees, comprising students and educators, representing a diverse array of eight distinct European higher education institutions. The primary objective of this gathering was to collectively generate innovative scenarios envisioning more auspicious futures.

Upon arriving at the camp, the students were methodically organised into eight distinct groups, each facilitated by a designated educator who provided guidance and mentorship as necessary. The discussions and ideation undertaken within these groups centred around the critical challenges facing humanity, with a particular emphasis on endeavours to ensure the habitability of the planet for future generations. Throughout the camp's duration, educators offered multifaceted support to students, which included the provision of lectures, such as the art of animation, VR development, impactful projects and transmedia storytelling. Additionally, expert presentations were integrated into the camp's agenda, with topics spanning climate change and data visualisation, offering students valuable insights and knowledge in these crucial domains.

Competencies

Both tutors and students exhibited substantial expansion in their comprehension of sustainability during the course. Through their rigorous research efforts, which were closely aligned with the prescribed tasks and subsequent presentations, students gained valuable insights into prospective future scenarios. For some participants, this educational journey served as a revelation, illustrating that even when conceiving seemingly novel and innovative ideas, there existed reference materials and antecedent concepts that bore relevance.

Moreover, the course provided an invaluable opportunity for enhancing international collaboration and fostering a heightened sense of global interconnectedness. During the camp, students were strategically assembled into international teams, an arrangement that catalysed the motivation of most groups to achieve commendable results in their respective assignments.

These teams were characterised by a rich diversity, incorporating students hailing from various countries and possessing distinct specialisations. For instance, in one team, members encompassed a film producer, cultural managers, media designers, and film editors.

The observed synergy was noteworthy, with students judiciously distributing tasks amongst themselves based on individual proficiencies and interests, thereby collectively crafting their collaborative output. Mutual learning was a prevalent theme throughout the camp, with interactions yielding significant knowledge exchange. Notably, one student

recounted the profound impact of witnessing a film student execute professional editing techniques, which contributed substantially to her own learning journey.

Additionally, the curriculum featured expert sessions that afforded students the opportunity to acquire specialised knowledge in pivotal domains. These sessions covered a spectrum of topics, ranging from climate change and data storytelling to narratives addressing ocean pollution. The animation workshop, in particular, delved into the concept of "staging," elucidating its significance as a valuable tool in the realm of visual storytelling. This emphasis on staging was portrayed as indispensable, regardless of whether the context pertained to illustration, animation, or the domains of (3D) photography and cinematography.

Furthermore, the camp nurtured an environment of camaraderie and cooperation through a range of non-professional, communal activities. Students alternated responsibilities, including cooking and cleaning, fostering an egalitarian atmosphere where ideas and plans were freely exchanged. These activities, although ostensibly unrelated to the core curriculum, served as conduits for the development of essential "soft skills," such as punctuality and task awareness. The acquisition of these skills was recognized as integral to the smooth functioning of the camp, thus imbuing all participants with a heightened sense of proficiency in these areas.

It is noteworthy that the camp was not solely a transformative experience for students; tutors also reported significant professional growth. One tutor, reflecting on his journey, expressed profound satisfaction with the overall experience. Another tutor was invigorated by the wealth of innovative ideas generated by the talented student cohorts, particularly highlighting the pertinence of concepts relating to the intersection of nature and technology. The multidisciplinary nature of the camp inspired valuable cross-pollination of ideas across diverse backgrounds, an experience that prompted the tutor to contemplate the nuanced layers of the interplay between nature and technology, as well as the intersections of art and science. This profound cross-cultural exchange was underscored as instrumental in the participants' personal and professional growth, accentuating the rich tapestry of perspectives derived from colleagues hailing from diverse countries and cultural milieus. Ultimately, the camp served as a catalyst for transformative learning, catalysing a comprehensive re-evaluation of the intricate relationships between nature, technology, and the realms of art, science and media production.

The tutors and students expanded a lot of their understanding of sustainability overall. Through their research work, related to the tasks and presentations, the students learnt a lot about possible futures. For some it was a learning experience to note that even if they thought that their idea is new and innovative, it is still possible to find some reference materials about it.

"I participated in this kind of project for the first time. I was impressed with the smooth organisation of this complex and multi-dimensional camp experience. Coming from a background of photography and cinematography, for me it was really interesting to exchange ideas with peers and colleagues from similar but different backgrounds, from other countries and cultural contexts. It made me learn and think a lot about many layers of nature and technology, arts and science."

statement by one of the participating educators.

Instructional Materials

The instructional materials deployed throughout the Sustainable Futures Camp encompassed a diverse array of resources and tools tailored to facilitate a multifaceted learning experience. These materials were meticulously curated to offer comprehensive support to both students and tutors, fostering an environment conducive to deep exploration and knowledge acquisition.

All teaching and information materials are published on the GEM website under the menu item:

- [COURSES & EVENTS / ART FOR FUTURES](#)

The main learning materials, templates and instructions from the preparatory course and the actual camp have been prepared in 2 detailed documents each:

- [Preparatory Courses: All Learning Material and Templates](#)
- [Sustainable Futures Camp: Daily Workshop Plans with Instructions](#)

One of the central platforms employed was Miro, a versatile online collaborative platform. Miro was strategically leveraged to serve as a digital canvas for collaborative work, enabling students to engage in visual brainstorming, ideation, and concept development. This platform offered an intuitive interface, making it an ideal choice for the co-creation of ideas (especially for the Art For Future Lab workshop), thereby facilitating the conceptualization of sustainable future scenarios. Its interactive capabilities empowered students to familiarise themselves with the Miro platform during preparatory online sessions, ensuring seamless integration into the camp's collaborative workflows.

Discord emerged as a pivotal tool for facilitating general communication among participants throughout the camp. As a versatile communication platform, Discord enabled students to engage in real-time discussions, share updates, and coordinate their activities. Its chat and voice communication features played a vital role in fostering a sense of connectivity and facilitating swift and efficient exchanges of information among students, tutors, and other stakeholders.

Google Docs served as a reliable repository for instructional materials, offering a convenient means of storing, accessing, and sharing course-related content. This platform was instrumental in housing presentation materials for expert sessions, offering students ready access to essential information and resources. Moreover, the collaborative nature of Google Docs allowed for the real-time editing and refinement of instructional content, fostering an environment of dynamic and responsive learning.

In addition to these digital platforms, the camp also integrated a plethora of physical tools and materials. Workshop and prototyping materials, such as pens, glue, and post-it notes, were provided to students to facilitate hands-on activities and creative ideation.

Moreover, the inclusion of VR and AR underscored the camp's commitment to embracing cutting-edge technologies, enabling students to explore innovative possibilities in the realm of sustainable media technology.

The comprehensive selection of instructional materials showcased the camp's dedication to providing a holistic learning experience that blended digital collaboration tools with hands-on resources. This approach ensured that students had access to a rich tapestry of materials, fostering a dynamic and interactive learning environment that catered to diverse learning styles and preferences.

Course Activities and Learner Interaction

Overview

The course activities and learner interactions within the Sustainable Futures Camp were orchestrated with precision to foster an environment conducive to deep learning, collaboration, and the attainment of overarching course objectives. These activities were thoughtfully designed to engage students in immersive, hands-on experiences while promoting interdisciplinary collaboration and the development of critical competencies.

The **initiation of the camp** was marked by an array of activities aimed at orienting students and promoting cohesion among participants. The students' arrival on the first day was accompanied by a communal dinner, which served as an icebreaker and an opportunity for participants to acquaint themselves with one another. Welcome introductions and interactive games further facilitated the formation of connections and eased the transition into the camp's dynamic learning environment. Team constellations, such as "working teams," "creative teams," and "nature walk teams," were introduced, providing students with defined roles and fostering a sense of structure within the camp.

The **Nature Walks**, a distinctive feature of the camp, were designed to immerse students in natural environments and stimulate their sensory engagement with the world. These walks were thematically oriented around the four elements—Earth, Air, Fire, and Water—and were intended to encourage personal introductions, promote a connection with nature, and provide opportunities for reflection. Roles within the teams were distributed, with participants assuming responsibilities as Location Guides, Spotting Guides, or Timekeepers. The nature walks thus facilitated experiential learning and enabled students to connect with the natural world, aligning with the camp's sustainability theme.

The **Art for Futures Lab** workshop constituted a pivotal component of the camp's activities, focusing on world-building, futures literacy, design thinking, and backcasting. During this workshop, students embarked on a journey to explore and envision sustainable futures. They engaged in collaborative exercises to identify Sustainable Development Goals (SDGs) aligned with their group's vision and embarked on world-building activities, creating characters, locations, and solutions for a positive future. This workshop fostered creativity, critical thinking, and the development of visionary narratives and first ideas for new media prototypes.

The subsequent **Design Sprint activities** provided students with a structured approach to idea generation and prototyping. These activities adhered to design thinking principles, equipping students with the tools and methods to rapidly conceptualise and iterate ideas. Tutors played a crucial role in guiding teams through the design sprint process, ensuring that each group was able to articulate a clear vision and develop prototypes aligned with their sustainable future scenarios.

Throughout the camp, students engaged in **interdisciplinary and cross-cultural teamwork**, leveraging their diverse backgrounds and expertise to tackle complex challenges. Collaborative project work was a cornerstone of the camp's pedagogical approach, enabling students to distribute tasks, leverage each other's capacities, and create collective works. Interactions among students were characterised by mutual learning, with individuals sharing their unique perspectives and skill sets to foster a holistic understanding of sustainability and media production.

The integration of **expert sessions**, focusing on topics such as climate change, data storytelling, and ocean pollution, enriched students' knowledge and contextualised their project work within pressing global issues. The animation workshop, with its emphasis on the concept of "staging," offered insights into effective visual storytelling techniques across various media forms.

Beyond the formal curriculum, the camp embraced a spirit of **non-hierarchical collaboration** through shared responsibilities, including cooking and cleaning. These non-professional forms of collaboration created an inclusive and egalitarian atmosphere, fostering the exchange of ideas and plans among participants. Timeliness and task awareness were underscored as essential "soft skills" for effective camp functioning, contributing to the development of valuable life skills among all participants. In summary, the course activities and learner interactions within the Sustainable Futures Camp were orchestrated to provide students with a comprehensive and immersive learning experience. These activities facilitated interdisciplinary collaboration, promoted experiential learning in natural environments, and nurtured competencies in sustainability, design thinking, and visionary prototyping. The integration of expert sessions and the emphasis on non-hierarchical collaboration enriched the overall educational journey, fostering holistic personal and professional development among participants.

Arrival activities

Upon arrival at the Sustainable Futures Camp, participants engaged in a series of structured activities aimed at fostering connections, setting expectations, and establishing a conducive learning environment. The initial day featured a diverse range of arrival activities. Participants arrived throughout the day and commenced with a communal dinner, allowing them to socialise and establish rapport. A formal welcome introduction in the evening provided an overview of the camp's objectives and structure. To facilitate getting to know each other, organisers orchestrated various icebreaker games. These activities were instrumental in helping students, who often hailed from different countries and academic disciplines, to become acquainted. Team constellations, such as working teams and creative teams, were introduced, which aided in forming bonds and teamwork. The camp's location within a natural setting in Drahnisdorf allowed for a unique opportunity to engage with the environment.

In summary, the arrival activities at the Sustainable Futures Camp were strategically designed to promote social interaction, environmental awareness, and a sense of collective purpose among participants as they embarked on their sustainability-focused journey. at the Sustainable Futures Camp were an integral component of the program, serving both educational and team-building purposes. These carefully structured excursions allowed participants to engage with the natural environment surrounding Drahnisdorf, Germany, and facilitated various learning experiences.

On the next day, teams embarked on nature walks organised into four groups with themes related to the four elements: Earth, Air, Fire, and Water. This thematic approach added depth and diversity to the participants' experiences, as they could choose a walk that resonated with their interests. Furthermore, the teams followed different routes to distinct locations, embracing the multidimensional nature of the camp's objectives. These walks served multiple purposes, including personal introductions, finding common ground, and fostering natural experiences and reflections on sustainability. Roles like Timekeeper, Location Guide and Spotting Guide were assigned to participants, enhancing their engagement and sense of responsibility during the walks. These roles contributed to the success of the activities by providing structure and direction.

The nature walks were not just opportunities for leisurely strolls; they were also designed to promote personal introductions and facilitate bonding among participants. During the initial phase of the walks, participants engaged in ice-breaking activities and exchanged information about themselves, which was particularly valuable as many of

them were from different countries and academic backgrounds. As the walks progressed, they shifted toward a more reflective and experiential focus. Participants were encouraged to use all their senses—sight, touch, smell, and more—to connect with the natural environment. The walks prompted discussions on the four elements, drawing connections between the elements and sustainability. Also, documentation played a crucial role in these walks. Participants collected artefacts from the environment, including plants, berries, and even an old bottle half-filled with soil. These artefacts were not only interesting finds but also served as inspiration for sustainability-related discussions and creative thinking. Participants actively engaged with the natural environment, collecting artefacts, taking (3D) photos and videos, and even creating sketches to document their experiences. While the nature walks were generally well-received, there were variations in participants' experiences. Some groups embraced the activities wholeheartedly, while others took a more relaxed approach. Nevertheless, these walks served as valuable ice-breakers, encouraged dialogue among participants, and helped establish a connection between the camp's sustainability focus and the natural world.

In conclusion, the nature walks at the Sustainable Futures Camp were carefully crafted to provide participants with a holistic experience. They offered opportunities for personal introductions, bonding, sensory engagement with nature, and thematic discussions related to sustainability and the four natural elements. These activities set a meaningful tone for the camp's broader objectives.

Art For Futures Lab

The Art for Futures Lab, a pivotal component of the Sustainable Futures Camp, played a crucial role in shaping participants' understanding of sustainability, fostering creative thinking, and guiding them in envisioning positive futures. The Art for Futures Lab, lasting for four hours, was designed to stimulate participants' creative faculties, encourage futures literacy, and facilitate design thinking and backcasting. The lab aimed to empower participants to craft their visions of a sustainable future and develop positive narratives and innovative new media concepts.

The central tool employed during the Art for Futures Lab was the designed Miro board, a collaborative digital platform. This versatile tool served as a canvas for brainstorming, idea generation, and the visualisation of concepts. Participants engaged with the Miro board to explore existing innovations, reflect on the strengths and weaknesses of the film and media industry. The lab commenced with an exploration of existing innovations related to sustainability. While intended to last 30 minutes, this phase often concluded sooner, reflecting participants' varying levels of interest in sustainability pioneers. This initial activity served as a springboard for the subsequent phases of the lab.

The next phase involved a reflection on the SDGs, a set of the UN's global goals addressing social, economic, and environmental challenges. Some participants, despite prior exposure during preparatory workshops, remained unfamiliar with SDGs. Nevertheless, they embarked on the task of identifying sustainable practices and goals aligned with three chosen SDGs in connection to their developed narratives. Worldbuilding, a creative exercise, followed this phase. Participants selected from a pool of 15 characters, identified a location, and envisioned existing solutions that could be scaled by the year 2050. This process encouraged participants to think beyond the present and visualise a future where sustainability prevailed. As participants amalgamated these elements, they crafted future prototypes and narratives. These narratives were shared with other groups, allowing for cross-pollination of ideas and insights. This phase was particularly vital as it offered a platform to articulate the new media formats that could effectively transmit sustainability messages to target audiences.

The Art for Futures Lab was instrumental in cultivating competencies essential for envisioning sustainable futures. It encouraged participants to think laterally and

experiment with various media practice skills. They discovered the potential of new media technologies and honed their futuristic prototyping abilities. The lab emphasised the development of multimodal design skills and storytelling prowess. Social competencies were equally nurtured within the lab's collaborative framework. Participants learned to collaborate transculturally and internationally, working seamlessly in interdisciplinary teams. They engaged in creative processes and decision-making, empowered themselves to take ownership of their ideas, and efficiently organised their teamwork. The lab fostered futures literacy by promoting a forward-looking perspective.

The core assignment's significance was emphasised, particularly in tailoring it to the varied interests of media students. Suggestions were made to enhance the emphasis on environmental sustainability within media, encompassing green production and user interface design. Some concern was expressed regarding the selection of target groups, which tended to be already favourably disposed to sustainability, prompting a call for more diverse and challenging audiences. Furthermore, recommendations included introducing even more scientific-based content before engaging in artistic creation and encouraging earlier prototyping that might then also demand an extension of the camp's duration.

In summary, the Art for Futures Lab in the Sustainable Futures Camp served as a creative crucible, where participants could synthesise their ideas, aspirations, and sustainability concepts. It empowered them to envision positive futures and provided them with the tools and competencies to craft innovative narratives. Moreover, it facilitated collaborative learning and transcultural teamwork, essential skills for addressing complex global challenges and promoting sustainability.

Design Sprint activities

"The students do not yet have a good feeling for what is a mature and consistent idea. Especially when suggesting game ideas, I felt a lack of clarity regarding the gaming concept, they did not deliver the "prove of fun". Instead of thinking through how the concept would actually play out, they quickly go forward to visual prototypes. This might be because they are more familiar with creating visuals than game mechanics and a special introduction or bespoke tutoring to such a topic would be needed.", quoted by one of the SFC educators.

The Design Sprint activities conducted during the Sustainable Futures Camp were instrumental in fostering creativity, innovation, and collaborative problem-solving among participants. They commenced on three days of the camp and spanned 5 sessions lasting approximately 2.5 hours. These activities adhered to a structured design thinking framework, with the primary goal of rapidly generating and refining innovative ideas. They demanded participants to think on their feet, collaborate effectively, and synthesise complex ideas into tangible prototypes within a constrained time frame. These activities followed a systematic process that encouraged participants to think critically and creatively:

Teambuilding: Participants were organised into eight interdisciplinary and cross-cultural teams. These diverse teams brought together individuals with varying backgrounds, skills, and perspectives enriching the ideation process by a wide range of insights and expertise.

Briefing: The teams were presented with a clear briefing that outlined the challenges and objectives of the Design Sprint. This briefing served as a guiding framework for the ideation process, ensuring that the solutions generated were aligned with the camp's overarching goals of sustainability and positive futures.

Idea Generation: Teams embarked on an intensive brainstorming session, where they generated a multitude of ideas related to sustainability, media formats, and positive futures. The ideation phase encouraged participants to think laterally and explore unconventional solutions.

Concept Development: After the initial idea generation phase, teams refined and developed their concepts further. They considered the feasibility, impact, and relevance of their ideas, aiming to create innovative and actionable solutions.

Prototyping: A crucial component of the Design Sprint, the prototyping phase enabled teams to transform their concepts into tangible prototypes. Depending on the nature of their ideas, these prototypes could take various forms, such as storyboards, digital composites, or 3D visualisations. The emphasis was on creating prototypes that could effectively convey the envisioned future scenarios.

Testing and Feedback: Teams presented their prototypes to peers and tutors, facilitating a feedback session. This feedback loop encouraged iterative improvements and refinement of the prototypes. It also provided an opportunity for critical evaluation and alignment with sustainability objectives.

Finalisation: After incorporating feedback, teams finalised their prototypes, ensuring they effectively communicated their visions of positive futures and sustainability. These served as tangible representations of the teams' innovative solutions.

Outcomes: The outcomes of the Design Sprint activities were notable. They showcased a diverse range of innovative solutions and media formats aimed at promoting sustainability and envisioning positive futures. Some teams crafted immersive VR games that tasked players with restoring ecosystems, while others developed interactive applications that raised awareness about sustainable practices. The prototypes effectively conveyed the camp's core message of sustainability and offered actionable strategies for addressing pressing global challenges.

In conclusion, the Design Sprint activities within the Sustainable Futures Camp exemplified the power of structured ideation and prototyping processes in fostering creativity and innovation. These activities not only empowered participants to envision positive futures but also equipped them with the skills and competencies needed to drive real-world sustainability initiatives.

Morning and Evening Activities

In the evenings the students mixed pretty well between the universities, or rather it was an oscillation between being in national groups and in mixed groups, which was actually good and probably also necessary for reflection.

Morning Activity: Furthermore, Embodiment Yoga Lessons were facilitated each morning during the camp by one of the educators. Each morning 30 minutes yoga-practise was offered at a meadow in a calm corner of the garden. Not obligatory, about 20 students came each day at 8 a.m. to experience the exercises together. During the seat in the "Easy Pose" the students were invited to breathe deeply, feel the wind on the skin and to listen to the nature-sounds around. The body was woken up by some exercises for stretching.

Evening Activities: Optional activities were organised each evening. VR experiences were shown, there was a film evening, the Camilla Plastic Ocean Plan project was presented and an introduction to animation was given.

Evening activity / Surprise Festival: On Thursday evening (day 5), the surprise festival was organised. Each of the eight camp working groups was assigned on the arrival day an impulse sentence to create some activity or performance for the evening. It seemed that most groups failed to plan it during the camp duties, which was actually the idea - having something inspiring to brainstorm on and talk about while doing routine chores.

However, some had extra meetings to ideate something, some not, and the activities were driven by a couple of protagonists in each group and they assigned tasks to the others. The evening worked out well either way and it was a good closure for the transnational and interdisciplinary workshop.

The surprise festival was a unique blend of challenges, excitement, and ultimate gratification. Having about 60 participants to manage, and seeing the engagement of the students and the sheer joy experienced by the participants made it all worthwhile.

The festival began in the seminar room, setting the stage for the theme that revolved around the four elements: Earth, Water, Air, and Fire. It was started with a captivating film by Group E that artistically portrayed these elements. It was followed by Group H's intriguing film talk with an animal. However, the subtlety of humour woven into the film, which was subtitled only in Finnish, created an air of mystery that added to the festival's overall charm. This was a green production as well, if not any other way in the fact that only one shot was needed for shooting the video and recording the audio tracks.

The host, the project room Drahnisdorf, who was not part of any activity took the stage with a short yet compelling documentary about the Sustainable Futures Camp from a distant perspective. It was received with resounding applause and set a tone of anticipation for the upcoming activities. Group F, with their hilariously witty stand-up comedy, sketching the intricate relationship between humans and the four elements, had everyone in stitches. Their light-hearted digression on star signs and their meanings brought about a wave of laughter that filled the room.

The next phase of the festival was a water ritual, where participants sat on yoga mats in a beautiful arrangement, representing blooming flowers. As water was symbolically given, the participants performed a visual representation of plants growing. It was a sight to behold; it was fascinating to see how each participant interpreted and showcased their growth in their unique ways.

As the twilight enveloped the venue, all participants moved on to the campfire segment. Group B, with their brilliant improvisation, had to deal with the challenge of a no-burn situation due to the dry nature of the surroundings. They orchestrated a mesmerising performance using smoke and torches to imitate fire, creating a magical, hypnotic illusion. The scene was further enriched by a soulful guitar strumming and singing that stirred up a raw, rustic ambiance.

An homage to the element Air was represented by a sound installation by Group C. Participants engaged with the installation by blowing at it, creating a melodious symphony that echoed through the gathering, creating a serene and soothing atmosphere. Next was Group D's dance for Mother Earth, where participants embodied different animals and insects like monkeys, herons, worms, and mosquitoes. The dance was an interpretation of Mother Nature's diverse species, their beauty and their quirks. Each participant, with their unique interpretations of their assigned creature, added their touch of creativity to this living art piece.

Finally, Group G presented a captivating pantomime performance, where everyone was invited to gesture what plant they might be. This interactive segment brought out the imaginative side of the participants, with each person contributing to a dynamic, creative energy field.

The surprise festival, with its unorthodox yet enthralling activities, generated an environment of joy, wonder, and active participation. The students were incredibly engaged, their eyes lit up with excitement and curiosity. They enthusiastically participated in each activity, showcasing their creativity and understanding of the thematic elements. Overall, the festival was a resounding success. One of the tutors, but a non-organizer of the camp, witnessed that everyone's engagement and the festival's smooth flow was indescribable. It was a testament to the idea that creative, educational, and environmental consciousness could all be tied together in a single, fun-filled event,

creating memories that would last a lifetime. The festival truly turned out to be an embodiment of the unity and diversity that Mother Nature represents.

Course Technology

For the preparatory course Miro was used as a platform. It provided a flexible tool for online work of many diverse participants. Other tools were used such as Discord for general communication, WhatsApp for group chat, and Google Docs for sharing learning materials.

In the camp the students used a lot of various techniques such as film shooting, rendering and 3D modelling, but also sketching, drawing, and photography AI was used to ideate narratives, and simple animations were created. As the internet didn't work continuously during the camp and provided communication challenges, tech- and production-savvy participants quickly found solutions for presenting materials

Most equipment, such as workshop and prototyping materials like pens, glue, post-its, VR and AR headsets and a VR-capable notebook were brought to camp. Furthermore, for the outdoor and group activities: e.g. guitars, camping materials and outdoor games.

Learner Support

The provision of learner support within the context of the Sustainable Futures Camp played a pivotal role in enhancing the overall educational experience for participants. The emphasis was on creating a supportive and inclusive learning environment.

Content-specific Preparatory Workshops (Online Sessions): Learner support commenced well before the physical gathering of participants. Preparatory workshops and online sessions were conducted to familiarise students with essential concepts, terminologies, and the digital tools they would be utilising during the camp. This early support ensured that all participants, regardless of their prior knowledge, had a foundational understanding of sustainability and collaborative tools like the Miro platform.

Practical Arrangements for Travel: The students needed a lot of support in practical arrangements to get ready for the camp. Unfortunately, not all students were able to travel as planned and had therefore difficulties to reach the destination. Therefore, learner support was prioritised to ensure students had the necessary resources and assistance. The tutors were readily available to answer questions, provided guidance and offered additional tutoring to students in need.

Group Assignments and Educator Guidance: Once at the camp, participants were organised into groups, with each group assigned an educator who played a multifaceted support role. Educators provided guidance and mentorship, ensuring that students had the necessary resources and direction to engage effectively in group assignments and activities. This personalised support facilitated smoother collaboration and knowledge exchange. During the nature work the tasks needed to be explained for the students. As the concept of nature walks was mostly new to participants, the students got support to understand the role of it as part of the sustainable design and production activities. The concepting facilitator gave detailed instructions for all methods and the overall program several times, especially methods for the Arts For Future concept creation, and the Design Sprint. Other guidance was needed for methodologies such as goal-setting, definition of target groups, impact strategy and new technology use. The tutors also helped the students in the discussion of sustainability topics like gender equality to the limited, decreasing natural resources.

Interdisciplinary and Cross-Cultural Teams: Learner support extended to team formation. The intentional creation of interdisciplinary and cross-cultural teams

contributed to a supportive learning environment. These diverse teams not only encouraged the exchange of varied perspectives but also fostered a sense of camaraderie and shared learning among participants.

Expert Sessions: The camp incorporated expert sessions on topics like climate change, data storytelling, and ocean pollution. These sessions provided valuable insights and knowledge, equipping participants with a deeper understanding of the sustainability challenges they were addressing. Learner support in the form of expert guidance enriched the learning experience.

Collaboration and Soft Skills: Beyond academic content, learner support encompassed the development of collaboration and soft skills. Participants were encouraged to collaborate in non-hierarchical ways, taking turns in tasks like cooking and cleaning. These activities promoted time management, teamwork, and effective communication skills, all of which are vital for successful collaboration.

Feedback and Peer Learning: Learner support mechanisms included peer-to-peer learning and feedback sessions. Participants had the opportunity to share their ideas, prototypes, and progress with peers. This peer feedback loop encouraged critical thinking and constructive criticism, further enhancing the quality of work produced.

Competency Growth: Learner support was instrumental in nurturing competency growth among both students and educators. Participants reported significant expansion of their understanding of sustainability, international collaboration, and interdisciplinary teamwork. Educators, too, experienced growth in their competencies through exposure to diverse cultural contexts and interdisciplinary discussions.

Personalised Learning: Learner support in the camp was designed to be personalised, acknowledging that each participant had unique strengths and areas for development. This personalised approach allowed individuals to focus on their specific learning needs and goals within the broader context of sustainability.

In conclusion, learner support within the Sustainable Futures Camp was a multifaceted and comprehensive endeavour aimed at facilitating the holistic development of participants. It encompassed not only academic guidance but also the cultivation of essential interpersonal and cross-cultural skills. This support structure significantly contributed to the success of the camp in fostering collaborative, interdisciplinary, and sustainable thinking among all involved stakeholders.

Accessibility and Usability

Usage of the English language caused some accessibility problems. Not all the team members have mastered the English language at the same level. In that kind of situation, the tutor summarised important points for the group and especially helped the student who was struggling with the language. Students had therefore to be guided to follow concepts and strategies to keep on track.

Content- and style-wise, the materials and tasks were conceptualised professionally, and communicated clearly and coherently. Therefore, the execution of the tasks met only a few or almost no hindrances. Students felt confident in their performances. The well designed Miro board (online platform) used for the camp was user-friendly and provided options for customisation based on individual preferences.

Tutor's insights:

“Acting as a tutor for one team gave the tutor a possibility to interact with a bit smaller student team and get to know the team. The students worked quite independently, and

the tutor checked from time to time the mood and the approach. Still the students gave good feedback for the tutor in the end. The communication between students and teachers ran easily, with occasional reaching out to other tutors who might be more helpful for some of the subtasks. Some teams also selected a student project manager and that impacted the amount of needed assistance.”

“In one group a “tutoring intervention” was needed when the group was seemingly unable to agree on a common idea. In another case the help of the peer tutor contributed well in finding the right technical solution for the team's ideas.”

“In one team, I had to help the group find a focus by writing down the important sentences and ideas during a discussion, and then presenting those to the team, which helped to come to an agreement.”

“The organisers of the GEM Camp made efforts to ensure accessibility and usability for all participants. The course materials were designed to be accessible to students with different learning styles and abilities. Some students had allergies and made their participation in the camp challenging,”

Evaluation Methods

The evaluation of the experienced Sustainable Futures Camp (SFC) is a critical component in assessing the effectiveness, impact, and areas of improvement within this innovative educational initiative.

The following **Methodologies for Evaluation** were used:

Pre and Post-Camp Surveys: To gauge the participants' initial perceptions and post-camp reflections, pre and post-camp surveys were administered. These surveys encompassed questions related to sustainability knowledge, interdisciplinary collaboration, and personal growth.

Retrospective Assessments by tutors: Directly after the course all tutors did a guided retrospective on post-its, following the lead questions:

1. What went well?
2. What did not go well? Or what could be optimised?
3. What ideas do I have?
4. Takeaways for the next workshop?

The **Post Camp Survey** among participants (student and tutors) and the **Retrospective Assessments by tutors** is also evaluated in more detail in a separate document.

Link to: [Evaluation of Post Camp Survey and Retrospective Tutor Assessment](#).

Additionally, the tutors wrote an individual experience report afterwards.

Qualitative Interviews: In-depth qualitative interviews were conducted with a select group of participants and educators. These interviews aimed to capture nuanced insights, experiences, and the transformative aspects of the camp.

Assessment of Projects: The quality and impact of the projects developed during the camp were assessed. Criteria included creativity, relevance to sustainability, and the incorporation of interdisciplinary elements.

Observations and Participant Feedback: Observations made by educators and organisers during the camp were documented. Additionally, feedback sessions during the camp provided real-time insights into the participants' experiences.

Findings and Outcomes

The Findings & Outcomes described here are mainly based on the experience reports written by the tutors directly after the course. The survey completed by students and tutors after the course and the retrospective of the tutors on post-it's have been analysed separately. Assessments of students and tutors are shown individually and are therefore comparable:

Link to: [Evaluation of Post Camp Survey and Retrospective Tutor Assessment.](#)

All feedback was used to assess the effectiveness of the camp and make improvements for future iterations.

The learning event was ambitiously designed, and was challenging in some parts. The mix of many different methods that were implemented during the preparatory workshops and the camp was well merged. Conclusively, it was an inspiring combination of nature walks, herbal tour, Art For Futures Lab workshop, impulse science and expert talks and design sprints. In summary, the program on-site as well as the preparatory workshops online were well-conceived. The intended results were achieved, and the students got well motivated and activated, and performed outstanding.

The coordination of such a large number of people needed serious planning. The execution of the camp activities surpassed all expectations. The main organisers anticipated possible disadvantages of such an event and did a lot of preparatory acts in order for the event to function as planned. Eventually, this approach proved to be extremely efficient since everything ran smoothly. Neither any type of incident, nor minor misunderstandings appeared during those six days of intensive collaborative work.

The nature walks were a good addition to the design sprints. Although, the students reported partly mixed experiences, as some of the routes were more seemingly exciting than others or were guided differently by the tutors. On two days at around 11 pm some students went off on long night walks into nature (10 kilometres one-way). This can be considered as a more radical variation of our nature walk and a tutor reported "I wonder how we could encourage more of such emergent engagement with nature". The juxtaposition of an unsteady internet connection with the desire to reconnect with nature highlighted the need to align the camp's objectives with its execution. While students worked often indoors with laptops and internet-based presentations, the camp's environment and nature-focused activities, such as morning yoga, games during the day in the garden, and evening walks, noticeably influenced the outcomes, illustrating the impact of the natural backdrop on the overall experience.

From an organisational perspective, the experience gleaned from the GEM camp in Drahnisdorf led to several recommendations for future iterations and other projects. These encompassed enhanced student support through additional resources, one-on-one counselling, or mentorship in group work. The utilisation of interactive platforms and technologies to foster engagement and preparedness for upcoming obligations was advocated. Furthermore, integrating hands-on activities and audiovisual exercises into the curriculum was suggested to enhance the overall learning experience.

Almost all students seemed to bond quite naturally. However, it was learnt as well that the tutoring lecturers from each university were desperately needed in camps, because they could help "their" students in orientation.

Overall, the following outcomes could be achieved:

Enhanced Sustainability Awareness: The pre and post-camp surveys revealed a significant increase in participants' awareness of sustainability issues. They

demonstrated a deeper understanding of the complexities and interconnections of sustainability challenges.

Interdisciplinary Collaboration: The camp successfully fostered interdisciplinary collaboration. Participants reported that working with individuals from diverse academic backgrounds and cultural contexts enriched their perspectives and problem-solving skills.

Personal Growth: Interviews highlighted personal growth and empowerment among participants. Many described newfound confidence in their ability to contribute meaningfully to sustainability discussions and projects.

Project Quality: The assessment of projects indicated a high level of creativity and relevance. The incorporation of multimedia and interactive elements showcased the development of multimodal design skills among participants.

Cultural Competence: Participants and educators alike reported an improved understanding of working in transcultural and international settings. This competence was seen as a valuable asset in addressing global sustainability challenges.

Futures Literacy: The camp's focus on futures literacy was reflected in the participants' ability to envision and prototype future scenarios. They developed futuristic thinking skills, which are essential for innovative problem-solving.

Green New Media Concepts:

The students' activities were slightly removed from the 'green' ideals around which their tasks were based, meaning that their final prototypes also felt slightly removed from the subject. However, overall, the design sprints were very productive and the students were well-supported by the consortium's educators. Some tutors, however, critically evaluated their own role and reported that it might have been useful to encourage the team "to stop and think about the direction they are heading".

Results of Student Works

Group 1 prototyped a heuristic mobile phone game called Ecotopia for youth and adults. The goal of the game is to learn about new eco innovations arriving in society all over the world. For this the player has to visit a school and fulfil missions. An accomplished mission leads to a planted tree in real life.

Group 2 developed the idea of a mockumentary and realised a trailer for it. The group focused on the advantages and possibilities of mushroom mycelium and what mycelium can do for a more sustainable world. By exaggerating and overstating the possibilities of this innovation, possible social discourses on disruptive innovations are thematised. (See: [screenshots of the documentary](#)).

Group 3 has envisioned an underwater research centre with an immersive and interactive exhibition concept that educates about the underwater world. (See: [screenshots of the concept](#)).

Group 4 promotes DIY vertical gardens. They conceptualised an immersive virtual reality game prototype that unfolds as an open-world adventure with a noble mission: the rescue and restoration of an island ecosystem on the brink of ruin. It aims at educating children between 9 and 13. Players are tasked with methodically revitalising the island's natural beauty through intricate environmental puzzles and quests, armed with virtual reality headsets and specialised tools for ecological restoration.

Group 5 conceptualised an immersive VR -Videogame called EcoQuest – Island Reborn. For the final presentation they showed a prototype trailer that explained how the game works.

Group 6 did a prototype for a sustainable future mobile game called Concordia, with the goal to educate, build community and to relax. It is based on the fact that the earthworm can break down plastic with his saliva within just a few hours. (See [mock-up](#))

Group 7 envisioned a boat that is powered by solar panels. This boat accommodates people who no longer have a home due to the increased sea levels and cleans the oceans of plastic waste. It is also self-sufficient by growing food on board. To convey their idea, they built a 3D model of the ship and made a prototype trailer that introduces the ship, the crew and the idea behind the project. ([See screenshots](#)).

Group 8 focused on quality education. They wanted to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. For that purpose, a school in trees was conceptualised, called SIT (Student in Trees). The idea is communicated via a graphic novel.

Sample results of student works

Group 2 – Documentary: Fungus City



Screenshots from the Mocumentary Trailer, Group 2

Group 3 – Project Atlanta



Screenshots from the Powerpoint presentation and the Prototype Trailer, Group 3

Group 6 – Project Concordia

Presentation Slides of Concordia, a sustainable future mobile game, group 6

Implications and Recommendations

Sustainability Curriculum: The success of the SFC highlights the importance of integrating sustainability education into higher education curricula. This model could serve as a blueprint for other institutions seeking to engage students in sustainability-focused initiatives.

Continued Evaluation: Continuous evaluation and feedback mechanisms should be embedded in the SFC structure to ensure ongoing improvement and relevance. This could include post-camp alumni surveys to assess the long-term impact.

Scaling and Outreach: Given the positive outcomes, consideration should be given to scaling the SFC model to involve more institutions and participants. This expansion can contribute to a wider network of sustainability-focused learners.

Incorporating New Technologies: To stay current, the SFC should explore the integration of emerging technologies, such as virtual reality and artificial intelligence, in its curriculum and activities.

Research Opportunities: The SFC provides a fertile ground for research in sustainability education, interdisciplinary collaboration, and future-oriented learning. Collaboration with academic researchers can further enhance its impact.

In conclusion, the evaluation of the experienced Sustainable Futures Camp underscores its effectiveness in enhancing sustainability awareness, interdisciplinary collaboration, and personal growth among participants. The findings emphasise the importance of experiential and learner-centric approaches to sustainability education. Furthermore, the implications and recommendations point towards the potential for the SFC model to inspire and catalyse similar initiatives in higher education worldwide.

Detailed Process Recommendations

Emerging sustainability challenges can ensure that participants are exposed to the latest research, innovations, and methodologies in the field. A robust curriculum review process involving educators, sustainability experts, and students can facilitate this refinement.

Integration of Advanced Technologies: The incorporation of advanced technologies, such as virtual reality (VR), augmented reality (AR), and artificial intelligence (AI), can elevate the SFC's learning experience. These technologies can facilitate immersive scenarios, data visualisation, and predictive modelling, aligning with the futuristic orientation of the camp.

Faculty Development: Investing in faculty development programs focused on sustainability education and interdisciplinary teaching methods is essential. Equipping educators with the skills to facilitate transcultural and interdisciplinary learning can enhance the overall quality of the camp.

Long-Term Impact Assessment: To measure the long-term impact of the SFC, conducting follow-up assessments and surveys with alumni is advisable. This longitudinal approach can provide insights into the camp's influence on career choices, continued engagement with sustainability, and contributions to addressing real-world challenges.

Global Expansion: Considering the success of the SFC, exploring opportunities for global expansion and collaboration with international institutions can be a strategic move. Establishing SFC chapters or partnerships in different regions can diversify perspectives and amplify the camp's global impact.

Interdisciplinary Research: Encouraging and facilitating interdisciplinary research projects among SFC participants could contribute to the development of innovative solutions to sustainability challenges. Collaboration with academic institutions and research centres could provide resources and mentorship for such initiatives.

Publication and Dissemination: Encouraging participants to document their SFC experiences, projects, and insights through academic publications, blogs, and multimedia

content can help disseminate knowledge and inspire others in the field of sustainability education.

Feedback Mechanisms: Instituting formalised feedback mechanisms, including post-camp evaluations and regular check-ins with participants and educators, could serve as a continuous improvement tool. Feedback should be actively used to adapt and enhance a Sustainable Futures Camp's structure and content.

In conclusion, these recommendations reflect a comprehensive approach to strengthening the Sustainable Futures Camp academically and operationally. The continued success of the SFC lies in its adaptability, responsiveness to emerging trends, and commitment to fostering a community of sustainability-focused learners and change-makers. By implementing these recommendations, a SFC can solidify its position as a pioneering platform for sustainable education and interdisciplinary collaboration.

Further (tutor) observations and ideas to help overcome challenges of the realisation of the SFC

Participants' observations provide valuable insights into the challenges encountered during the implementation of the Sustainable Future Camp (SFC). Firstly, the duration of the course was noted to be sufficient; however, not all students engaged in the preparatory online sessions, often due to conflicting commitments. This observation underscores the importance of employing versatile learning methods that can accommodate students' diverse schedules and enable local teachers to offer support during preparatory sessions.

Additionally, the disconnect between the nature walks and the camp's primary assignment was noted, suggesting the utility of guidelines for nature walks that could be integrated into a mobile app for outdoor use. Such an approach would streamline the focus on essential activities like nature observations and artefact collection, although concerns were raised that this might divert attention from the authentic environmental experience.

Notably, the SFC was recognized as a potential model for "pop-up epistemology" projects, characterised by short-term, intensive knowledge production in unique conditions, illustrating its value as a benchmark for such endeavours.



Co-funded by
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APPENDIX



GEM – Course Description – Course 2023

Course Theme: Innovations for sustainable positive futures

Co-creating desirable scenarios for the year 2050

As part of the GEM Erasmus+ Cooperation Partnership Project

This course aims to understand the current sustainability challenges related to climate change and our coexistence with nature. The aim is to deal with the uncertainty facing [planetary boundaries](#) - in relation to specific target groups and multipliers of individuals, organisations and societies.

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

02.05. – 30.05.2023 (tbc)	Preparatory Sessions with weekly online workshops
Zoom Link for all Online Workshops: https://filmuniversitaet-de.zoom.us/j/61648516721 Meeting-ID: 616 4851 6721	
02.05. 15:00 – 17:30 CET	Workshop 1: Introduction of the project and each other / Definition of terms / Knowledge Hub
09.05. 15:00 - 17:30 CET	Workshop 2 (tentative): Intro into existing solutions in business and politics, definitions and programmes
23.05. 15:00 - 17:30 CET	Workshop 3 (tentative): Intro into Future Prototyping and Art For Futures Lab
30.05. 15:00 - 17:30 CET	Workshop 4 (tentative): Speculative Design and Design Sprint methods, 3 horizons framework
04.06. – 09.06.2023	Sustainable Futures Camp, Drahnisdorf (Germany) https://projektraum-drahnisdorf.de/
04.06. Arrival 17:00 –	Gettogether, Intro & Teambuilding Sessions
05.06. 9:00 – 18:00	Start of Design Sprint + Nature Experiences and Explorations
06.06. 9:00 – 18:00	Co-Creation, ideation, sketching, exploring the design options of concepts
07.08. 9:00 – 18:00	Development of concepts
08.06. 9:00 – 18:00	Development and testing of concepts/prototypes, End of Design Sprint
19:00 –	Festival of group's creative interventions
09.06. 9:00 – 12:00	Presentations of camp results / Afterwards Departure
Summer 2023	Possibility to elaborate on prototypes (with experienced content creators)
After Summer	Expert Feedback sessions (tbd)

Sustainability as a positive vision to tackle climate change

Although millions of people around the world are demanding climate protection and sustainability, the speed of the necessary adaptation and mitigation is completely inadequate. Many people recognize that planetary boundaries, the climate and biodiversity crisis, the unregulated globalised financial system, and the increasingly unequal distribution of wealth that endangers peace as a whole poses existential problems for human societies. They are ready to question the world and critically reflect the way they have lived up to now, and search for solutions. At the same time, however, existing solutions seem partly unknown, unclear or contradictory or difficult to imagine. Climate change is proven to be the most urgent and consequential issue humankind has ever faced. How content producers address it in the next two decades might determine the kind of world current and future generations will live in. In the book “The Future We Choose” by Christiana Figueres and Tom Rivett-Carnac (they led negotiations for the UN’s Paris Agreement of 2015) two possible scenarios for planet Earth are outlined. One describes what life on Earth will be like by 2050 if Paris climate targets will be failed. The other one refers to a carbon neutral, regenerative world, and how head-on optimism can fend off the occurring disasters.

Overview of module

In this module, 9 partner organisations incl. about 40 students and 20 lecturers will join. We aim to focus on positive scenarios in order to reflect and change current lifestyles, normative values and contemporary culture of the Anthropocene. It is upon us as globalised, increasingly urban societies to envision and implement new ways of socio-ecological transformation and creative visions for social cohesion and well-being (quality of life for whom), as well as the health of the planet. Creativity and imagination as a common basis is the starting point for strategically considered communication processes and new media formats that can spark public discourse about sustainable visions.

Our major topic will focus on Green Transformation in Media and Arts.

Subtopics might include other topics, e.g. *Anthropocene Kitchen - How to organise food production and consumption for 9 bn people on planet Earth?* or *Food Trends based on Regenerative Farming facing climate change.*

As a result of this module, visions of ideal places are researched, envisioned and described. Appropriate media formats get conceptualised to transfer these ideas to accelerate green transformation forwards positive futures. These don’t need to be solutions, but serve as visions or missions conveying intentions and values of the teams, in search of addressing issues causing climate change.

In the **first two preparatory workshops** (02.05/ 09.05.) participants will learn about challenges and international agreements to cope with the Anthropocenic issues. More research can be done individually. These findings will then be presented, too.

The **following two prep workshops** (23.05./ 30.05.) will give participants an overview of the Art For Futures Lab method and how positive futures can be envisioned. Attendees learn about Futures Literacy, and how to develop narratives of a 2050 scene based on future trends. To make it easy and simple, sustainable and regenerative futures can be envisioned based on already existing innovations that will be introduced.

Within a local group of 5 participants further research of local challenges and inspiring social initiatives, innovations or startups in local areas can be done.

In the **Sustainable Futures Camp (04.06. – 09.06.)** local groups from Croatia, Germany, Greece, Finland, Malta and Poland will get together in a rural one-week camp near Berlin. There we will have nature



experiences and explorations and reconnect to indigenous wisdom. Furthermore, partakers will form groups of 4 people and ideate and accelerate their concepts to spread knowledge about positive futures supporting the convivial conversation and needed socio-ecological transformation.

On Friday morning every group is invited to present their concepts that can be further developed **over summer**.

After summer the prototypes and production plans can be discussed with specific science and media experts.

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

About the location

The [Projektraum-Dransdorf](#) is a natural and inspiring place for projects, seminars, team retreats and celebrations. Based on the concept of creative action, the association understands that all creative activity takes place out of a field having inspiring effects on actions. The simultaneity of the past, the present and what is to come makes the place special: much of the old days has been preserved. In many rooms there is historical furniture in its original condition in order to preserve the original, rural atmosphere of this estate. But there is also convenience, modern technologies and methods that are needed today to find out what could be tomorrow.

A large linden tree and chestnut tree have stood in the garden since the founding years, which bear witness to the fact that it was once laid out like a park. In GDR times, a kindergarten with green niches was created. There are spacious lawns for parties on a total of 7000 square metres, as well as small booths for retreat and study. [Picture Gallery](#)

Address: ProjektRaum Drahnisdorf, Dorfstraße 17, 15938 Drahnisdorf
[Route](#)

As there are limited **Accommodation Options** we'd appreciate to mark your first till third choice. We try to have everyone in their favourite place, but we aim to distribute it equally between the partner organisations.*

Options*	1. choice	2. choice	3. choice
Option 1a (single tent)			
Option 1b (single tent, but no own tent available**)			
Option 1c (group tent)			
Option 2 (glamping tent for 2 persons)			
Option 3 (shared bedrooms for 2 or 3 people)			

* Tents unlimited, capacities for bedrooms and glamping limited

**we aim to get tents from the German team, so probably no shipping needed.

Please check the **registration deadline** with the GEM contact person at your university.

Platform and Support

- 1-2 mentors are assigned for each team of up to 4 students;
- Miro for prep workshops;
- Communication platform tbd;
- Dedicated learning & research materials will be available online;
- Tutorial and support available for using Slack for team-internal communication; ● Prep workshops and camp sessions will be facilitated by an international teaching team.

Competencies taught in the Course

- Knowledge
 - Sustainability concepts, Sustainable Design;
 - Green Production;
 - Content creation based on positive future storytelling
- Skills
 - Rapid content & interface prototyping for (interactive) media formats;
 - Concept and project planning for (interactive) projects;
 - Pitching and reviewing a media concept;
 - Exploring the creative potential of new media 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
- Design Sprint Method
- How to prototype and test an (interactive) / participative media format



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

GEM is funded by the Erasmus+ Programme of the European Commission under Grant Agreement No. 2022-1-DE01-KA220-HED-000088645



Background Information (Facts and Figures) GEM – Green Education in Media / Course 2023

Preservation of livelihoods and resources

Agriculture and forestry, soil fertility, soil loss

If the air continues to warm up as a result of climate change and can therefore also absorb more water, peatlands are threatened with water loss – up to 30% higher evapotranspiration compared to forests. Due to the increasing drought in the vegetation, boreal bogs could become a source of CO₂ if the rising temperatures are not accompanied by an increase in precipitation (Helbig et al. 2020). But the warmer and drier the boreal zone, the higher the chance that the peat layers of the bogs themselves will start to burn, releasing their stored carbon. According to estimates, Arctic peat alone contains between 40 and 500 billion tons of carbon (Vassander & Kettunen 2006). About a quarter of the permafrost lost in Canada over the past three decades has thawed to fire-induced processes (Gibson et al. 2018). Meanwhile, smoke and soot travel hundreds of kilometres across the Arctic, settling on surfaces covered with snow and ice and absorbing heat. Satellite images show that sea ice and snow are darker and are therefore melting faster. If water or soil is exposed, the sunlight is absorbed instead of reflected back and heats up the entire region - which in turn means warmer summers, more plant mass and therefore a higher risk of fire.

Conservation of the diversity of life (biodiversity)

Climate protection

Samaniego et al. (2018) compared to the 1.5 K Paris target, an increase of 3 K—which represents current projected temperature change—is found to increase drought area by 40% ($\pm 24\%$), affecting up to 42% ($\pm 22\%$) more of the population. Droughts become twice as frequent; Thus, due to their increased occurrence, events of this magnitude will no longer be classified as extreme. In the absence of effective mitigation, Europe will therefore face unprecedented increases in soil moisture drought, presenting new challenges for adaptation across the continent.

Climate economics

Hänsel et al. (2020) point out that less than two degrees of warming would be optimal from an economic point of view if the avoided climate damage is offset against the costs of climate protection. Researchers arrive at this conclusion using an updated form of the DICE model.

Biodiversity Loss

The age of extinction: The biodiversity crisis in numbers - a visual guide, The Guardian, 2022, Words by Patrick Greenfield. Graphics by Lucy Swan, Glenn Swann, Paul Scruton and Chris Watson. Data and graphics research by Federico Acosta Rainis <https://amp.theguardian.com/cdn.ampproject.org/c/s/amp.theguardian.com/environment/2022/dec/06/the-biodiversity-crisis-in-numbers-a-visual-guide-aoe> (Video)

Leadership in times of the Earth's New Normal



Leading the Charge through Earth's New Normal, World Economic Forum, January 18, 2023, Panel Speakers: Joyeeta Gupta, Johan Rockström, Roshni Nadar Malhotra, Al Gore, Gustavo Francisco Petro Urrego, Marc Benioff, Andrew Forrest, Fawn Sharp, Yo-Yo Ma, Gim Huay Neo (Video)

<https://www.weforum.org/events/world-economic-forum-annual-meeting-2023/sessions/leading-the-charge-through-earths-new-normal>

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GEM Camp Information / 4 - 9 June 2023

Address: ProjektRaum Drahnisdorf, Dorfstraße 17, 15938 Drahnisdorf

Please keep in mind that we are located in a village, 60 km away from Berlin. A Berlin trip won't be feasible.

Packing recommendations:

- Bring whatever you need personally for a week abroad (5 days)
 - Please bring flip flops, a warm jacket and rainwear as the weather is quite unpredictable...In general, June in Germany (in the county Brandenburg) is rather mild in terms of temperatures. (Average temperatures during the day are 23 degrees Celsius, at night 13 degrees - so it can be warmer or even colder ;-)
- There is a small swimming pond nearby which may be warm enough for swimming. So, if you are interested, take a bathing suit.
- Bring your water bottle to stay hydrated with water from the tap. The water quality is very good in Brandenburg. Non-alcoholics can be purchased on site, and alcoholic beverages (wine, beer) after 18:00. So bring enough change with you.
- Except for farmer Dieter, where agricultural products such as sausages, eggs and honey can be bought, there are no shopping facilities. If you have any other food needs besides the three meals provided - like e.g. sweets - please bring that with you.
- As we aim to conceptualise new ideas for (visual) storytelling please bring your sketching utensils such as a sketchbook, pens and pencils, laptop, tablets, batteries, camera, phone, music/sound equipment, accessories or any other items that you might want to use.
- Bring a torch and other lights (e.g. headlamp) to ensure you are prepared for the dark nights.
- Bring yourself a locker for your backpack to lock your valuables. There are 15 lockers in the "Gutshaus" and an additional room in the cellar that can be locked to keep your valuables safe. But do not worry, so far no thieves have been seen at the location.
- If you stay in glamping tents or in shared rooms, bedding plus sheets and towels will be provided.
 - The glamping tents are located in the backyard of the "Gutshaus".
 - Please be respectful to the neighbours, especially keep silent after 22:00.
- The tent area is located in the opposite of the Gutshaus across the street. If you stay in a tent you need to bring everything:
 - Tent, camping mat or air mattress, sleeping bag and towels.
 - There is one shower and one extra toilet at the camping site near the tents. But, you can also use the showers in the buildings of the "ProjektRaum", which is just across the street.
 - If you are missing some of the components, someone in the group probably might have some things extra to share. Please let us know **until May 15th** and we'll try to arrange it for you.

Camp Services:

This camp can only be made possible by all of us helping out with community activities and necessities. Therefore, each participant will have to take on special tasks during the week. Distributed tasks include:

- Daily self catered breakfasts for all
- Daily self catered lunches for all
- Dinner will be served for us, but we will need to clean up. Catering will be vegetarian. Let your teachers know, if you prefer vegan food, need to eat gluten free or if you have nut allergies.
- Daily documentation and insta posts (we have a [Google Drive Folder](#) for all pics taken.)
- Check and clean up location regarding waste and other issues
- Preps for activities incl. working areas, evening activities etc.

All involved must perform each task 1- 2 times during the week. The tasks are distributed fairly on site by lottery.



Further Camp Activities:

Workshops are scheduled between 10:00 and 18:00 h. Before and after we would like to offer many **optional** leisure activities and just as for the necessities we'd be grateful to get your support here. Pls send your offers (ideas) to s.tummescheit@filmuniversitaet.de.

- **Morning Activities (8:00 – 8:30)**
 - Yoga? If the sun salutation is your morning ritual, let the others do it, too.
 - Jogging? If you go jogging every morning, then let your fellow campers know so they can join you.
 - Something else? Tell us.

- **Evening Activities (19:30 – 22:00) all related to sustainability ;-)**
 - **SUN:** Campfire
 - **MON:** Explorations in nature
 - **MON:** Movie Night – suggest a film or bring your own work.
 - **TUE:** Impulses by climate scientist and data scientist.
 - **TUE:** Movie Night – suggest a film or bring your own work.
 - **WED:** Herbs Guiding Tour
 - **WED:** Dj(anes) are needed. Let's dance!
 - **THU:** Surprise Festival - stay tuned!

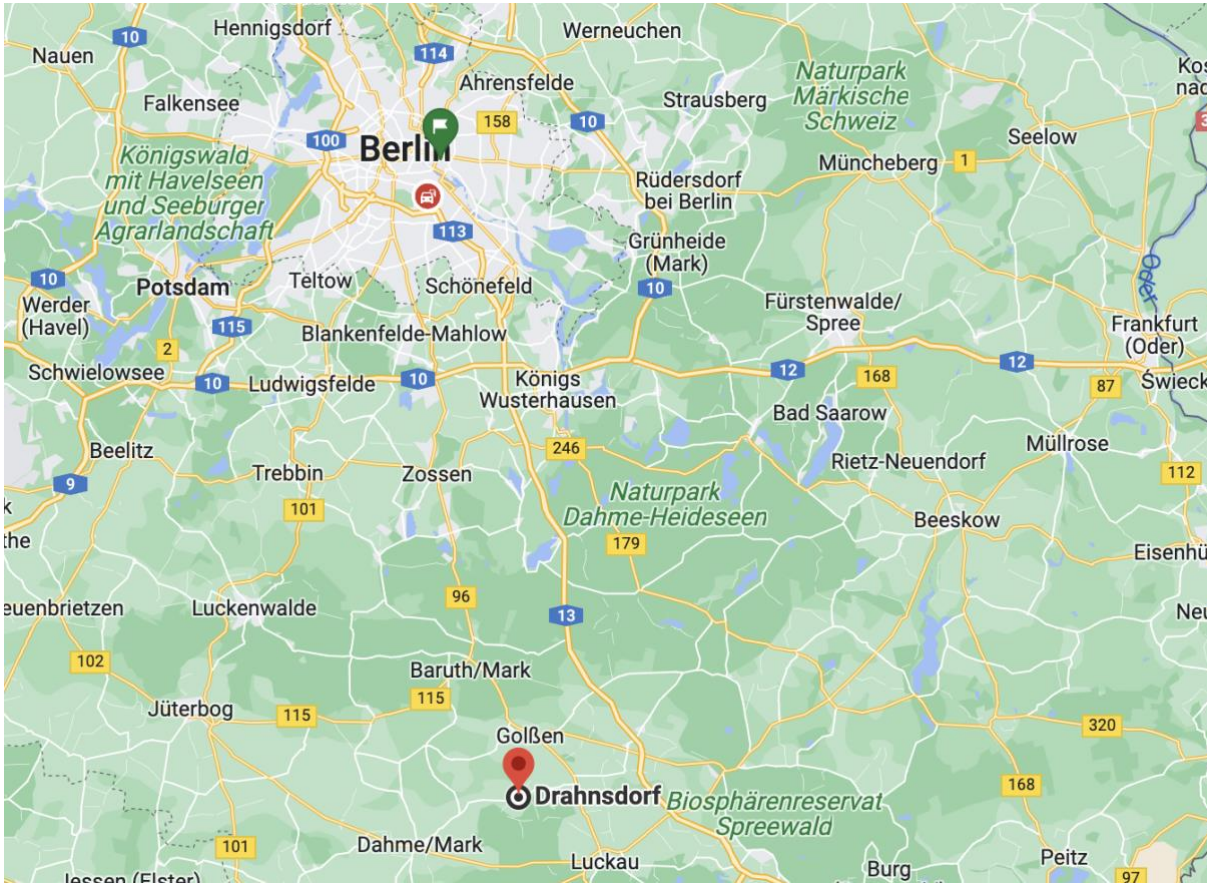
Camp Rules:

- Waste Management - pls keep the areas we are working and staying in clean and alive. Ref. waste management, there will be bins to be found inside and outside - marked with paper, plastic, compost and general - please use them adequately!
- Smoking areas will be allocated, so please take care - no cigarette buds on the ground or in the forest - so best, bring your pocket ashtray to be prepared!
- We are located in a small village. Respect the neighbours. Noise after 22:00 has to be avoided.

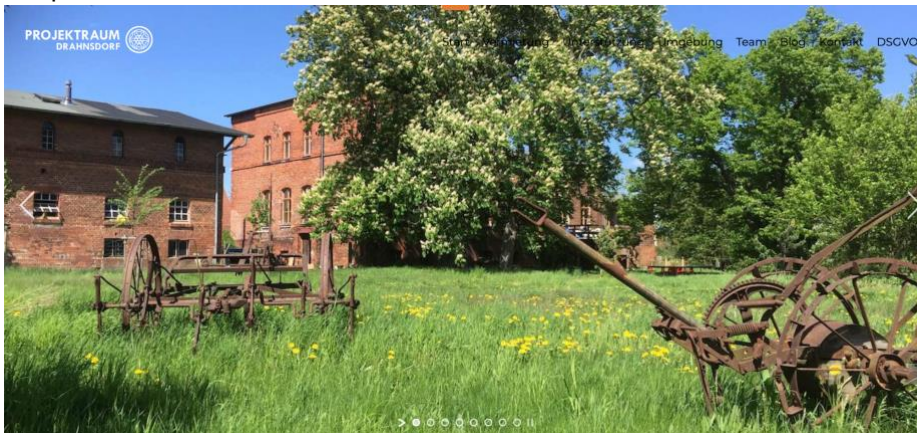


Location:

Drahnsdorf is located about 90 km south of Berlin.



For pictures of the location see the website:



<https://projektraum-drahnsdorf.de/>



About GEM

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- 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
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GEM Course Briefing

Innovations for sustainable positive futures

Introduction

This course aims to understand the current sustainability challenges related to climate change and our coexistence with nature. The aim is to deal with the uncertainty facing [planetary boundaries](#) - in relation to specific target groups and multipliers of individuals, organisations and societies.

Digitization is the driving force in the early 21st century, causing multidimensional changes in society and challenging traditional economic systems. Internet and cloud computing have contributed to the emergence of new global interaction formats and enable access to and exchange of information and knowledge at any time. Virtual storage, media as well as hardware and software have become extremely cheap in recent years, which has led to an immense spread of information, rapid data processing, but also extensive use of natural resources. In the digital age, digital technologies ensure flexible data and knowledge transfer through networked digital communication channels. On the other hand, innovative IT and data management systems are constantly developing new application options. The added value is based on the linking of software with hardware, with which e.g. economic systems such as the circular economy can be implemented (Scott 2015). In ecosystems that are becoming more and more complex, the digital aggregation of information and the intelligent integration of value-added elements can bring about important solution impulses for sustainability concepts in the areas of conflict (Gerten & Schellnhuber 2015. Planetary Boundaries).

The question is: How can digital skills and competencies and the creation of digital and virtual worlds occurring as story-worlds in filmmaking, serial writing and games, virtual explorable worlds in XR and digital communities in social media design be utilised to reflect on the impact of digital technology on our natural environment?

In the Sustainable Futures Camp we'll reflect on this guiding question when co-creating narratives of positive futures and developing new ideas for media formats and prototypes.

Problem Description

Although millions of people around the world are demanding climate protection and sustainability, the speed of the necessary adaptation and mitigation is completely inadequate. Many people recognize that planetary boundaries, the climate and biodiversity crisis, the unregulated globalised financial system, and the increasingly unequal distribution of wealth that endangers peace as a whole posing problems for human societies.

They are ready to question the world and critically reflect the way they have lived up to now, and search for solutions. At the same time, however, existing solutions seem partly unknown, unclear or contradictory or difficult to imagine. Climate change is proven to be the most urgent and consequential issue humankind has ever faced.

How content producers address it in the next two decades might determine the kind of world current and future generations will live in. In the book "The Future We Choose" by Christiana Figueres and Tom Rivett-Carnac (they led negotiations for the UN's Paris Agreement of 2015) two possible scenarios for planet Earth are outlined. One describes what life on Earth will be like by 2050 if Paris climate targets will be failed. The other one refers to a carbon neutral, regenerative world, and how head-on optimism can fend off the occurring disasters.

Overview of module



In this module, 9 partner organisations incl. about 40 students and 20 lecturers will join.

We aim to focus on positive scenarios in order to reflect and change current lifestyles, normative values and contemporary culture of the Anthropocene¹.

Our major topic will focus on Green Transformation in Media and Arts.

Subtopics might include other topics, e.g. *Anthropocene Kitchen in the year 2050 - How to organise food production and consumption for 9 bn people on planet Earth?* or *Food Trends such as Innovative Food Concepts or Regenerative Farming² facing climate change.*

As a result of this module, visions of ideal future scenarios are researched, envisioned and described as well as appropriate media formats get conceptualised to transfer these ideas to accelerate green transformation forwards positive futures. These don't need to be solutions, but serve as visions or missions conveying intentions and values of the teams, in search of addressing issues causing climate change.

Target group / Audience

Your scenarios and prototypes about the positive future might help creatives and decision makers of tomorrow to better understand the impact that their actions can have on the world, steering them on a path towards desirable futures. Decision makers of tomorrow are currently e.g. 'digital natives', 'millennials' or they belong to 'generation z'.

Approach

The **Art For Futures Lab** workshop methodology (developed in 2020 by Nicole Loeser/ IFAI Berlin, Germany and Prof. Angelica Böhm/ FUB, Germany) uses modified methods based on world building, design thinking, speculative design, regnosis/backcasting and future prototyping, which invites its participants in particular to help shape positive future visions.

The concept of **Worldbuilding** has been around for centuries used in various forms of storytelling, such as in mythology and epic literature. However, the term "worldbuilding" was popularised by science fiction and fantasy authors in the 20th century.

The Worldbuilding Institute (WBI Los Angeles/USA) provides resources and training for creators offering a variety of methods and approaches to worldbuilding, the most prominent is the "bottom-up" method. It involves starting with small details and building up to larger structures and systems.

Design Thinking is a problem-solving methodology that has evolved over time and been influenced by many designers and thinkers. One of the pioneers was the industrial designer and educator, Richard Buchanan, who first introduced the term "Design Thinking" in 1992.

Design Sprint

Sprint helps the teams to quickly solve the problems. Designing, prototyping, and testing ideas with users are typical phases of Design Sprint.

<https://designsprintkit.withgoogle.com/>

Regnosis/Backcasting is often used in sustainability and environmental planning, as well as in business and strategic planning. It is a planning and decision-making methodology that involves starting with a desired future scenario or goal and working backward to determine the steps and actions needed to achieve that vision/goal. This process also can help to identify potential obstacles or challenges and to develop strategies to overcome them.

Backcasting is a proactive approach to planning, as it focuses on creating a vision of the future rather than simply reacting to existing conditions. By starting with a desired future scenario, backcasting encourages

¹ will be defined and contextualised together in groups during in the Kick-Off

² will be defined and contextualised together in groups during in the Kick-Off



creative thinking and innovation, and helps to ensure that decisions and actions are aligned with long-term goals.

Future prototyping is a design methodology that involves creating prototypes of products, services, and anticipate experiences that are not yet available, with the aim of exploring potential future scenarios and identifying new opportunities for innovation. It typically involves a combination of design thinking, foresight methodologies, and advanced technology such as virtual reality, augmented reality, or 3D printing.

Furthermore, you will also learn about **speculative design**. This design practice involves creating design concepts, products, or services that are intended to provoke discussion, debate, and reflection on potential future scenarios, social and cultural issues, and technological developments. Designers and creatives use their imagination and critical thinking to explore possible futures and to question and challenge current norms and assumptions. Speculative design is concerned with asking questions and opening up new possibilities involving the use of storytelling, visualization, and other narrative techniques to create scenarios that are engaging and thought-provoking.

These methods will be the basis of various ideation activities to help envision your positive future scenario, to then develop design fiction prototypes and/or concepts for diverse media formats. You will be encouraged to think laterally, experimenting with a variety of media practice skills and discovery-based learning methods.

Output

The output should be a positive future scenario in the form of an experienceable concept visualization. The target audience should understand and feel the circumstances of the anticipated future that you have imagined. You also should think about the impact your output will provide in the current society and present a strategy how you would like to get people changing their behavior, mindset or understanding. Depending on the skills and the interests of you and your team, this may be a prototype for a hypothetical device, application or service, an animated storyboard, a concept art, a prototype for a 3D or mixed-reality environment, a series of digital composites of audiovisual assets that might help communicate your fictional scenario. There are actually no limits here, as long as you transport your vision to the recipient. Try to think of all the senses to make the experience holistic and to fully immerse your audience in your anticipated/speculative future scenario.

Production

You will imagine and explore how sustainable media technology might work in the future.

You are free to explore topics around the interdependency on natural resources, i.e. conserving/regenerating natural environments, innovative food production, circular societies, and utilize whatever tools and practices you think and feel are most suitable. Depending on the needs of you ideas your tutors will provide guidance on appropriate production methods. The amount and effort in actual asset production should be critically reflected according to green production. The goal is the creation of a prototype, not a full and final product.

Competencies taught in the Course

We expect that you bring a creative mind, collaboration skills and an interest to push boundaries and think about the future.

- Knowledge
 - Sustainability concepts;
 - Green Production;
 - Content creation based on positive future storytelling
- Skills



- Rapid content & interface prototyping for (interactive) media formats;
- Concept and project planning for (interactive) projects;
- Pitching and reviewing a media concept;
- Exploring the creative potential of new media technologies;
- Future Skills;
- Visioning Skills;
- Futuristic prototyping;
- Multimodal design skills;
- Storytelling
- Social Competencies
 - Building and working in a transcultural and international collaboration;
 - 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
- Design Sprint Method
- How to prototype and test an (interactive) / participative media format

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