EMEX Curriculum Framework



EMERGING MEDIA EXPLORATION



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Introduction Emerging media competencies span diverse areas. The three main areas defined are the production, user and society perspectives. Three further sections cover everything that intersects the main areas. Furthermore, there are basic competencies that need to be covered within EMEX.

Needed skills are also divided into:

- Characteristics of an ideal "Emerging Media Explorer" (C)
- Competence Profile (CP)
- Knowledge Profile (KP)

It also needs to be noted, that no emerging media professional can cover all areas and skills holistically and competently, but they must at least know their significance.



Visualisation

• Transmedia Storytelling • Machine learning / Artificial Intelligence • Professional self-reflection • Professional practices • Media literacy • Funding and policy

PRODUCER

• Concept Pitching

- Concept writing
 Media Production Workflows
- Software Production Workflows

• Media Sociology • Ethical Reflection • Visioning and Strategic Foresight

SOCIETY

- Technology Convergence • Media Convergence • Research skills / academic skills • Experimentation and Investigation • Transdisciplinary Collaboration • Problem solving skills • User experience testing • Accessibility
- Human-Centred Design Communication Trends
- USER • User Experience Design

• History of Media Technology • Knowledge of Media Content

• Technical Proficiency

• Project Managment • Dramaturgy • ICT proficiency

• Multimodal Design

Prototyping
 Computational Thinking

• Storyboarding

• Skripting • Data analysis

- Multi-modal User Interface Design Foundations of Human Perception
- Ergonomy



PRODUCER (CP) Concept Pitching: The students shall be able to create idea and concept presentations and pitch them to different audiences.

(CP) Concept writing: Students shall be able to write concise concepts for different media and be able to argue how content and a new media form, technology or platform correspond.

(KP) Media Production Workflows: (CP) (and how to adapt them) Students should consider and plan the various phases of their production, from the initial concept development to the realisation of a project. They should be able to learn from other kinds of project workflows and integrate new methods as they see fit for the needs of the particular medium.

(KP) Software Production Workflows: Students should understand the basic milestones of a software production workflow and the people involved in it.

Between PRODUCER / USER

(KP) History of Media Technology: In the context of teaching emerging media competencies, the knowledge of history of media technologies allows students to draw analogies, recombine existing concepts to create new media technologies or to avoid doing things that have been done before - an awareness of what emerging media technology can do, its limitations and possibilities, as well knowledge of 'what has already been done; a sense of history of the field'

(KP) Knowledge of Previous Media Content: Having knowledge of previous and existing content across media contexts (what has been done before, common formats, trends, etc.) This is essential for informing the ideation process and developing innovative storytelling formats

(CP) Technical Proficiency: The confident use of devices, applications, software, services, and ICT-based tools to carry out tasks effectively, as well as the ability to stay up to date as technology changes

(CP) Project Management: Importance of organisational, and leadership and communication skills across diverse groups, and across different management models used in different disciplines. A frequent problem is the harmonization between workflows in Filmmaking, Interaction Design and Software development. In established media, the project manager can draw on more or less established workflows. This comprises even interdisciplinary workflows, like in app or game development.

However, in Emerging Media, the different disciplines in the team all start from a clean slate, there is no processual hierarchy or established workflow, the workflow has to evolve in a continuous peer-review process.



(KP) Dramaturgy: Basic and timeless rules of storytelling. Students should be able to arrange experiences following dramaturgical rules, on and across different platforms (see transmedia storytelling).

(CP) Multimodal Design: Emerging media may address any of our senses and thus take any human-sensible form. To express ideas for any possible upcoming media, we have to be able to sketch with and for all our senses. (Skills on visual and audial sketching are easier to acquire than olfactory sketching, but let's see what the future brings). Multimodal design is based on multiple modes of interactions that include modalities such as vision, voice, touch, and taptic feedback.

(CP) Storyboarding: The ability to produce visual representations of media content and interaction flows, divided into ordered drawings/sketches that provide pertinent details and additional information (dialogue, camera movement, etc.)

(CP) Prototyping: Developing proof-of-concepts, visualisations and tangible models (a proxy that allows for exploration and communication of ideas in transdisciplinary working)

(C) (CP) Computational Thinking: The skill to apply problem-solving methods that involve expressing problems and their solutions in ways that a computer could also execute.

(CP) Scripting: From understanding how algorithms work in general, to coding skills in specific areas, a general knowledge of any programming language helps to acquire new skills related to the authoring of emerging media. It should be noted that though every team member should have basic knowledge, only some would need advanced knowledge. Coding skills are often required for emerging Media, as rarely are authoring tools readily available to author the content. Instead, one has to improvise with text editors and raw source code.

(CP) Data analysis: Being able to extract useful information from data and making decisions based on it.

USER

(CP) User Experience Design: The ability to design meaningful and relevant experiences for users. This involves the design of the entire process of acquiring and integrating the product, including aspects of branding, marketing, design, usability and function.

(CP) Multi-modal User Interface Design: Students shall have a working knowledge on device-independent basics of user interface design (like Donald Norman's "Psychology of everyday things").



	(KP) Foundations of Human Perception : Understand the basics of how human perception assigns meaning to the millions of sensations we encounter daily and how experiences are created by our senses. (How do humans see, hear, taste, smell, feel?)
	(KP) Ergonomy: Understanding the psychological and physiological factors that impact the design of products, processes, and systems.
Between USER / SOCIETY	(CP) (KP) Human-Centred Design: Students should know methods to involve the human perspective into all steps of the problem solving process.
	(KP) Communication Trends : Knowing about communication trends, regarding the content and new channels and the corresponding target groups.
SOCIETY	(KP) Media Sociology: Understanding social conditions, impact and consequences of media communication.
	(CP) Ethical Reflection : Students should be able to reflect the impact of Emerging Media on the individual, the society and their own profession and formulate ethical standards or guidelines.
	(CP) Visioning and Strategic Foresight: Students shall be able to use trend- exploration and narrative scenario tools to create visions for future media landscapes. It is hard to think of the future in the context of the present. Narrative scenarios provide an "anchor in the future" for our thinking.
Between SOCIETY/ PRODUCER	(KP) Transmedia Storytelling: Foundations of storytelling, paired with a sensibility how different channels influence and shape a story and how they can work together, are comprised in transmedia storytelling. Transmedia storytellers explore and embrace emerging media to extend the potential of their stories. In a way this is a dependent competency. You first have to be able to explore the characteristics and potential of an emerging mediaum before you can include it in a transmedia storytelling design.
	(KP) Machine learning / Artificial Intelligence : AI is a massive innovation driver in the media industry and it is important to have a basic understanding of how it works and what its potential is. Emerging Media likely might include AI as part of the end user experience (think chatbots) or of the production tools.

(C) Professional self-reflection: The ability to reflect critically on one's own role as a professional in society and to develop a sense of ethics



(CP) Professional practices - to learn and apply relevant professional practices, standards and codes of conduct.

(CP) Media literacy: the ability to access, analyse, evaluate, create, and act using all forms of media communication.

(KP) Funding and policy:

The students should learn their way around funding opportunities and public regulations around a new medium.

EMEX

(C) Research skills / academic skills: The ability to research into a new unknown domain, to select, synthesize and evaluate information

(C) Transdisciplinary Collaboration and Communication: The exploration of Emerging Media might mean investigating its properties from the ground up, referring to basics of human perception and social interaction. In such an exploration team, you might profit from working with new or unusual partners from different sectors and disciplines.

(KP) Accessibility: New forms of media may pose new obstacles or opportunities for different user groups. Students shall be able to assess the accessibility potential of new media technologies for different user groups and use it for better, inclusive designs and content.

(CP) Problem solving skills: Students shall be able to cope with uncertainty, to set goals and use initiative to develop solutions in response to a range of cultural issues and technological developments. This includes ideation skills, critical thinking, creativity, as well as context-specific research skills. The ability to think laterally, addressing problems from a variety of perspectives and contexts.

(CP/KP) User Experience Testing: Knowledge to adapt and apply multi-modal methods of user experience testing to different kinds of media interfaces and contents.

(C) Experimentation and Investigation: Students should be able to set themselves goals for their media exploration, think of a way to prototype and test it, and to draw conclusions from it. These may be similar to design thinking skills, however, there are multiple ways of exploring, from goal-oriented to artistic.

(KP) Technology Convergence: Refers to the integration and merging of different technological attributes, features and formats from across a variety of media contexts (often from seemingly unrelated backgrounds).



(KP) Media Convergence: Media convergence may result from technology convergence, when convergence of production tools leads to new hybrid forms of media, like currently in gaming and film, driven by real-time engines. Media convergence may also happen on the level of storytelling or platform, e.g. forms between journalism and documentary filmmaking.