Research – Development – Innovation course description

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<td colspan="5">Course title: Project 2055: The crystal ball of digital technology</td>
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<td colspan="5">Course coordinator(s) / lecturer(s): Karola Xénia Kassai

Contact details: karola.kassai@kassailaw.com</td>
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<td>Level and Code:
B-KF-401-ELM-242501-02,
M-KF-301-ELM-242501-02</td>
<td>Position in the Curriculum:
RDI</td>
<td>Recommended semester:</td>
<td>Credits: 5</td>
<td>Teaching hours: 48
Student workload: 102</td>
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<td>Related codes:</td>
<td>Type: (lecture/ seminar/practice /combined)</td>
<td>Is it open to sign-up as an elective?</td>
<td colspan="2">Specific pre-conditions to sign-up as an elective:</td>
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<td colspan="5">Interlinkages / prerequisites, parallel units:</td>
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<td>Aims and principles of the course:
This course aims to improve critical thinking skills by examining the human element and the structures of human responsibility for technology and innovation in the race for competitiveness through art.
The goal is for students to understand and be able to evaluate the potential uses of technological innovations for art and society and also recognize and assess possible risks some applications of modern technology might pose on our world and values.</td>
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<td>Intended learning outcomes / professional and transitive competencies:
Knowledge: During the course students will learn and discuss the most important ethical questions related to technological innovation and the structures of human responsibility related to the field from multiple perspectives. They will become familiar with the main regulatory approaches concerning technology in art and society, and will be able to evaluate the different aspects and concerns related to the effect of the laws and enforcement strategies on the future of society and art.</td>
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	Skill: The course aims to improve collaborative research skills, critical thinking skills, interdisciplinary and presentation skills. **Attitude:** The course intends to foster a collaborative and interactive environment. Students will work in teams and present their work to their peers, who must provide substantial feedback. **Autonomy and Responsibility:** The teams will be responsible for conducting original research and creating an art project using a medium of their choice reflecting their research conclusions and representing the consequences imagined and reasoned in the research and its effects on the society of the future.
3. Itinerary	**Course content (topics and themes):** Imagine the world we will live in in 30 years if digital technology develops at the same pace as it does now. Choose an aspect you believe will be crucially different and present it as an art project using your medium of choice. Whether you see a world of wonders or a dystopian future is up to you. During your research, you would have to imagine, show and reason the process that led to the conclusion you envisioned and the human element that was the turning point leading to the outcome (no robot uprising just yet!). Students will have to create an art project using the medium of their choice based on their research presenting the consequences of human responsibility. The course will cover the following topics: - Technology and ethics: the most pressing ethical questions related to emerging technologies. - The human element: the questions of responsibility in the innovation and decision-making processes, principles and general overview of procedures and powers. The current global state of play, possibilities, and dangers. - Utopia or dystopia: the future of technology in art and popular culture. Examples, look-back to the 20th-century concepts and look out to their 21th-century counterparts. - Research methodology and concepts of critical thinking. - Examples of current problems related to technological innovation and society: deep fakes, privacy, manipulation, election fraud. - The topics of the lectures will correspond to the various phases and milestones of the project: planning, research, realization, and final presentation.

RDI methods and tools used in the course:

Students are required to conduct interdisciplinary collaborative research and create an art project of their choice, based on their findings showing the imagined consequences (positive or negative) of technological advancement. Therefore, collaboration and providing constructive feedback to peers will also be crucial parts of the course. In order to keep the projects realistic, students have to conduct qualitative research related to their topic, such as surveys or polls to define what hopes, fears and risks related to technology are present in society.

Specificity of the learning process:

Digital technology is changing the world as we know it. Some find this worrying, some see endless opportunities. Some questions and problems are imminent and realistic, some are a little far-fetched while others seem stranger than fiction.

Could artificial intelligence develop to a state where it can make or alter human decisions? In 2023 a man ended his life after a chatbot encouraged him to "sacrifice" himself to stop climate change.

Darth Vader is a human with a severe disability and health issues. Had he been considered a human in 1977 when Star Wars was released? Should Captain America have consulted the UN Security Council before intervening in Sokovia? If yes, should he have been tried at the International Criminal Court for his actions?

Who owns the copyrights of an artwork created by AI? What happens if someone uses another artist's work to teach the AI system to make art? How can artificial intelligence be used to manipulate elections? How to handle deep fakes?

Digital technology changes the world every day and brings new ethical and regulatory questions.

This course aims to explore the most important moral questions and the role of human responsibility in shaping the world of digital technology. During the course, we will create a bridge between the political, economic and regulatory structures of today and imagine a future where the ethical questions related to digitalization and technology become even more pressing. For this, we will introduce some of the current national and international decision-making and regulatory strategies, but also draw inspiration from literature and popular culture where ethical problems of technology were presented to wider audiences.

We will use fictional case studies and start discussions at the edge of fiction and reality to inspire students to create their partly fictional research and art project but keep realistic ties to the world as we know it.

Structure of the semester:

Week 1. Introduction - The state of technology as of today. Technology in art. The ethical dilemmas of technological innovation. The most pressing ethical questions related to emerging technologies.

Week 2. Presentation of research topics chosen by the participants, discussion.

Week 3. The human element: technology and society. Examples of current problems related to technological innovation and society: deep fakes, privacy, manipulation, election fraud.

Week 4. The human element 2.: The current global state of play of regulations, possibilities, and dangers. The global overview of the different approaches to technology, the inter- and supranational organizations and its decision-making procedures, possibilities of enforcement.

Week 5. Utopia or dystopia: the future of technology in art and popular culture. Examples, a look-back to the 20th-century concepts and look out to their 21th-century counterparts.

Week 6. Research methodology and concepts of critical thinking.

Week 7. Presentation of the research and the concepts of the final projects. Discussion.

Week 8. The human element 3. Leadership: Positive examples and action paths, avoiding negative outcomes.

Week 9. The human element 3. Leadership: Leader for a day exercise.

Week 10. Final project workshop. Preparation for the presentations at the end of the semester. If time allows, the lecturers will also present real and fictional case studies or ethical questions related to the topics of the final projects to spark a discussion and help students to move forward with their projects.

Week 11. Presentation of the final projects, discussion, feedback and evaluation.

Students' tasks and responsibilities:

Students will work in small teams. Each team will have to imagine the society in 2055 which is radically different from our world in at least one aspect (positive or negative) due to emerging technologies and innovation. They have to write a 5-8 page long essay introducing and reasoning the change, its consequences and the responsibility of society or a group of individuals behind it with realistic ties to the present. After presenting their research, each

	group has to create an art project of their choice which shows their imagined scenario and its effects on society in 2055. **Learning environment:** Classroom
4. Evaluation	**Assessment:** **Requirements to be met:** Students are required to work in teams (pairs or small groups). Personal attendance is required (2 absences will be allowed), the class activity and substantial feedback on the lecture and their peers' work will be essential to completing the course. Each team will be required to present their research topic on Week 2, send their research essays to the course leader and present their findings on Week 8 and present their final projects on Week 11-12. (The exact deadlines for the assignments will be discussed during the first lecture.) **Method of assessment:** - Class presence and activity - Written research assignment (an 5-8 page long essay presenting the imagined change in society, the human responsibility and turning point leading to the consequences) - Creating and presenting an art project using a medium of choice based on the research representing the imagined state of the world based on the research **Assessment criteria, and how is the mark calculated:** The course includes regular presentations on the project milestones, and we intend to foster a collaborative environment. Therefore, active class participation and constructive feedback on the projects of others will amount to 15% of the final grade. The research on which the project will be based has to be comprehensive and must have logical ties to the current state of the decision-making procedures related to (regulating) digital technology. The essay will contribute to 40 % of the final grade. The presented art project showing the changes and consequences of society and the world as a result of the imagined turning point must have strong ties to the conclusions of the research and will amount to 45% of the final grade. Excellent (5) 91-100% Good (4) 81-90% Satisfactory (3) 61-80% Sufficient (2) 51-60%

	Fail (1) 0-50%
	Recommended readings:
	Harari, Yuval Noah: 21 Lessons for the 21st Century, Vintage Books, 2019. Part I: The technological challenge.
	Further readings, documents, sources:
	At the beginning of the semester, lecturers will also offer a pool of essays. articles and books from contemporary thinkers and literary works, films and television series, mainly from the science fiction genre as recommended materials to help students draw inspiration for their projects.
	Recognition of knowledge acquired elsewhere/previously/validation principle: - **No exemption from attending and completing the course.** - Exemptions from the acquisition of certain competences and the completion of certain tasks may be granted. - Some tasks may be replaced by other activities. - Full exemption may be granted.
	Other informations:
	Schedule and venue for personal consultation: