

GE4103: TECHNOLOGIES IN ART, SCIENCE AND EVERYDAY LIFE

Effective Term

Semester A 2022/23

Part I Course Overview

Course Title

Technologies in Art, Science and Everyday Life

Subject Code

GE - Gateway Education

Course Number

4103

Academic Unit

School of Creative Media (SM)

College/School

School of Creative Media (SM)

Course Duration

One Semester

Credit Units

3

Level

B1, B2, B3, B4 - Bachelor's Degree

GE Area (Primary)

Area 1 - Arts and Humanities

Medium of Instruction

English

Medium of Assessment

English

Prerequisites

Nil

Precursors

Nil

Equivalent Courses

Nil

Exclusive Courses

SM4159 New Media Art in Technological Lifeworld

Part II Course Details

Abstract

This course philosophically investigates the impact of technologies on human beings and the various practices we engage in. Drawing on the traditions of philosophy of technology and post-phenomenology, the course asks: what is the role of technologies in the construction of human reality? Do technologies add to our quality of life? Where does the human stop and the technology begin? Are some technologies “better” or “worse” than others? What is “new” in the gadgets we are accustomed to calling new technologies? How are science and technology related? Is art possible without technology? Are computer games “less real” than football or badminton?

The philosophical questions covered by lectures and in-class discussions based on assigned readings will be rooted on the level of everyday through self-reflective experiments involving technological deprivation and diary-keeping which will be followed up by in-class presentations and/or short papers. The philosophical thinking about technology in this class will ultimately culminate in the final papers.

This course aims at presenting the student with a variety of philosophical viewpoints regarding technology in the contexts of science, art, and everyday life, allowing each student A) to arrive at their own reasoned standpoint regarding the role of technology in the contexts of both contemporary life and their own discipline-specific practices and B) express this standpoint both orally and in writing.

This will be achieved through 1) lectures, demonstrations and screenings which present case studies of individual technologies and their use-contexts, paying special attention to the ways in which technologies are embedded in practices of scientific research, artistic creation, communication and entertainment, 2) exercises that practically examine the relationships between humans, technologies and the world and 3) discussions that aim at critical assessment of contemporary claims about technology, both utopias and dystopias (such as instances of “hype” and “media panic”)

Course Intended Learning Outcomes (CILOs)

CILOs	Weighting (if app.)	DEC-A1	DEC-A2	DEC-A3
1 Describe the key theoretical positions and concepts concerning the nature of technologies and their role in constituting human experience of the world (e.g. regarding “purposes” of technologies and the distinction between “objects” and “tools”)		x	x	x
2 Critically discuss the contribution of technology to one’ s discipline-specific practices (e.g. research methodologies made possible through technological advancement)		x	x	x
3 Evaluate the impact of technology on human body and one’ s relationship to the world and society at large (e.g. technologies as extensions of the body)		x	x	x
4 Criticize popular claims about technology (e.g. cases of “hype” and “media panic”)		x	x	x

A1: Attitude

Develop an attitude of discovery/innovation/creativity, as demonstrated by students possessing a strong sense of curiosity, asking questions actively, challenging assumptions or engaging in inquiry together with teachers.

A2: Ability

Develop the ability/skill needed to discover/innovate/create, as demonstrated by students possessing critical thinking skills to assess ideas, acquiring research skills, synthesizing knowledge across disciplines or applying academic knowledge to real-life problems.

A3: Accomplishments

Demonstrate accomplishment of discovery/innovation/creativity through producing /constructing creative works/new artefacts, effective solutions to real-life problems or new processes.

Teaching and Learning Activities (TLAs)

	TLAs	Brief Description	CILO No.	Hours/week (if applicable)
1	Lectures	Lectures explaining theories of technology (including works of Heidegger, Haraway, Hayles, Ihde, and Verbeek) in relation to the themes of the course	1, 2, 3, 4	
2	In-class discussions	In-class group discussions on assigned readings	1, 2, 3, 4	
3	Quizzes	In-class quizzes on assigned readings	1, 2, 3, 4	
4	Demonstrations	Demonstrations (e.g. lectures, guest lectures, screenings, lab/workshop/atelier visits) on the use of technologies in discipline-specific scientific, professional and artistic practices	2, 4	
5	Field research	Independent field research on technologies leading to in-class student presentations followed by group discussions	2, 3, 4	
6	Technological deprivation experiment	“Technological deprivation” experiment, a self-reflective examination the effects of living without a particular technology	3, 4	
7	Reaction paper writing	Reaction paper writing based on assigned readings, case studies of technologies, screenings, and demonstrations	1, 2, 3, 4	
8	Final paper	Independent research leading to final paper	1, 2, 3, 4	

Assessment Tasks / Activities (ATs)

	ATs	CILO No.	Weighting (%)	Remarks (e.g. Parameter for GenAI use)
1	Presentation on a technology based on field research (students pick an interesting technology, and for example relate it to other similar technologies, observe its use, relate its use-context to similar use-contexts) and a presentation on technological deprivation experiment (based on a diary/logbook consisting of observations of how the lack of the particular technology affects one's everyday life). Feedback on the presentation will be given by email and followed up in consultation if needed.	1, 2, 3, 4	25	
2	Quizzes based on assigned readings. Feedback on quizzes will be given immediately afterwards in class.	1, 2, 3, 4	15	
3	Reflection texts written in response to in-class demonstrations. Reflections will be graded pass/fail, feedback given only on on-demand basis.	2	15	
4	In-class participation and discussion	1, 2, 3, 4	5	
5	Final paper on a topic relevant to the themes discussed in class (e.g. analysis of technology's contribution to one's discipline-specific practices, critical evaluation of a popular claim about a particular technology, or analysis of the impact of a particular technology on quality of life). Feedback on final papers will be given by email and followed up in consultation if needed.	1, 2, 3, 4	40	

Continuous Assessment (%)

100

Examination (%)

0

Assessment Rubrics (AR)

Assessment Task

1. Presentations

Criterion

This assessment task will grade on content and fluency of presentation. Students should show their co-operation to conduct a well-organized presentation with their own argument and evidence from independent research, readings, notes, and interdisciplinary thinking.

Excellent (A+, A, A-)

- Rich, informative content, excellent grasp of the material with in-depth and extensive knowledge of the subject matter
- Rigorous organization, coherent structure, and systematic exposition with a strong sense of narrative
- Superior presentation skills: distinct pronunciation, fluent expression and appropriate diction, exact time-management
- Critical analysis with insightful comments opening up new issues, or suggesting the ability to theorize
- Excellent connections to relevant matters in their own field/discipline (e.g. relevant debates, perspectives, concepts, problems, discoveries, histories, milestones)

Good (B+, B, B-)

- Adequate content with firm grasp of the material that informs the audience on a subject matter
- Reasonable organization, balanced structure and composition
- Good verbal communication: comprehensible pronunciation, fluent expression and diction, fair time-management
- Good connections to relevant matters in their own field/discipline

Fair (C+, C, C-)

- Adequate content with comprehensive grasp of the material demonstrating basic knowledge of the subject matter
- Fair organization, weak structure and composition
- Fair presentation skills: acceptable pronunciation, expression and diction, fair time-management
- Some connections to relevant debates in their own field/discipline

Marginal (D)

- Weak content, loose grasp of the general ideas with some knowledge of the subject matter
- Poor organization, structure and composition
- Poor presentation skills: marginal pronunciation, expression and diction, poor time-management
- Attempt at connections to relevant matters in their own field/discipline

Failure (F)

- Inadequate content, fail to identify the general ideas with knowledge of the subject matter
- No organization, structure or/and composition
- Poor presentation skills: marginal pronunciation, expression and diction, minimal time-management
- No connections to relevant matters in their own field/discipline

Assessment Task

2. Quizzes

Criterion

This assessment is based on the amount of correct answers in the 10 questions in each quiz.

Excellent (A+, A, A-)

10 correct answers

Good (B+, B, B-)

8-9 correct answers

Fair (C+, C, C-)

7 correct answers

Marginal (D)

5 or 6 correct answers

Failure (F)

Less than 5 correct answers

Assessment Task

3. Reflection texts

Criterion

This assessment task grades the students' ability to comprehend written materials and reflect upon them in written form, in relation to what they have learned in this class and other classes (e.g. those in their Major programmes).

Excellent (A+, A, A-)

- Excellent grasp of the text, able explain all the key concepts, assumptions and debates
- Rigorous organization, coherent structure
- Original and reflective analysis with insightful comments opening up new issues
- Contextualization of the text in relation to a variety of relevant and well-chosen perspectives and/or questions from their own field/discipline.

Good (B+, B, B-)

- Firm grasp of the text, able to explain key concepts and assumptions
- Reasonable organization, balanced structure
- Reflective, but not original analysis with connecting the text to relevant issues
- Contextualization of the text in relation to some perspectives and/or questions from their own field/discipline.

Fair (C+, C, C-)

- Passable grasp of the text, demonstrates some understanding of the key concepts and assumptions
- Passable organization and structure
- An attempt at a reflective analysis of the text
- Contextualization of the text in relation to some perspectives and/or questions from their own field/discipline.

Marginal (D)

- Passable grasp of the text, An attempt at an organization and structure
- A summary, rather than a reflective analysis of the text
- No attempt at contextualization of the text in relation to some perspectives and/or questions from their own field/discipline.

Failure (F)

- No grasp of the textNo attempt at organization or structure
 - Idiosyncratic 'sharing' or personal reflection inspired by the text, rather than analysis or summary of the text
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Assessment Task

4. In-class participation

Criterion

This assessment task grades the students' ability to 'think on their feet' about the topics of the class, (e.g. through questions and in-class conversation)

Excellent (A+, A, A-)

- Asking questions often
- Participating in discussion often (i.e. following up on other students' questions) Questions and follow-up comments are relevant to the topic being discussed
- Questions and follow-up comments demonstrate excellent familiarity with assigned readings and past classes, and excellent ability to synthesize and reflect on what has been learned in this class and in their own major classes.

Good (B+, B, B-)

- Asking questions sometimes
- Participating in discussion sometimes (i.e. following up on other students' questions) Questions and follow-up comments are relevant to the topic being discussed
- Questions and follow-up comments demonstrate good familiarity with assigned readings and past classes, and good ability to synthesize and reflect on what has been learned in this class and in their own major classes.

Fair (C+, C, C-)

- Asking questions sometimes
- Participating in discussion sometimes (i.e. following up on other students' questions) Questions and follow-up comments are somewhat relevant to the topic being discussed
- Questions and follow-up comments demonstrate not a total alienation from readings and past classes, and a passable ability to synthesize and reflect on what has been learned in this class and in their own major classes.

Marginal (D)

- Asking questions a few times during the semester
- Participating in discussion a few times during the semester (i.e. following up on other students' questions) Questions and follow-up comments are not completely alien to the topic being discussed
- Questions and follow-up comments demonstrate not a total alienation from readings and past classes, and an attempt at synthesizing and reflecting on what has been learned in this class and in their own major classes.

Failure (F)

- Questions and follow-up comments are disconnected from the topic being discussed (e.g. idiosyncratic personal reflection)
- Questions and d demonstrate a lack of familiarity with readings and past classes, and/or inability or a lack of attempt at synthesizing and reflecting on what has been learned in this class and in their own major classes.

Assessment Task

5. Final paper

Criterion

This assessment task grades the students' ability to comprehend written materials and reflect upon them in written form in relation to what they have learned in this class and other classes (e.g. those in their Major programmes), and to synthesize these insights into an essay containing original insight

Excellent (A+, A, A-)

- Excellent grasp of the reference materials, able to explain and apply all relevant concepts
- Rigorous organization, coherent structure
- Genuinely original, rigorous, and empirically justified synthesis of insights from reference materials with insights from field research and original thinking

- The topic is relevant to the class and defined as to sustain analysis of sufficient depth
- Well-organised, and diverse bibliography suggesting breadth and depth of coverage, containing independently found items in addition to relevant references mentioned in class.

Good (B+, B, B-)

- Firm grasp of the reference materials, able to explain key concepts and assumptions
- Reasonable organization, balanced structure
- Synthesis of insights from the reference materials with insights from field research and original thinking, lacking in one of the following areas: originality, rigor, justifiability
- The topic is relevant to the class and defined as to sustain analysis of sufficient depth
- Bibliography, which lacks in one of the following areas: organization, breadth, depth, but contains independently found items in addition to relevant references mentioned in class.

Fair (C+, C, C-)

- Passable grasp of the reference materials, some ability to understand and apply relevant concepts
- Passable organization and structure
- Synthesis of insights from the reference materials with insights from field research and original thinking, lacking in more than one of the following areas: originality, rigor, justifiability
- The topic is relevant to the class but too abstract / detailed to allow analysis of sufficient depth
- Bibliography, which lacks in more than one of the following areas: organization, breadth, depth, but contains independently found items in addition to relevant references mentioned in class.

Marginal (D)

- Passable grasp of the reference materials, some ability to understand and apply relevant concepts
- An attempt at organization and structure
- An attempt at a synthesis of insights from the reference materials with insights from field research and original thinking, lacking in originality, rigor and empirical justifiability
- The topic is somewhat relevant to the class but too abstract / detailed to allow analysis of sufficient depth
- Bibliography, which lacks in more than one of the following areas: organization, breadth, depth, and contains only relevant references mentioned in class.

Failure (F)

- No grasp of the reference materials, no ability or attempt to understand and apply relevant concepts
- No attempt at organization and structure
- No ability or attempt at a synthesis of insights from the reference materials with insights from field research and original thinking, lacking in originality, rigor and empirical justifiability
- The topic is irrelevant to class and/or too abstract / detailed to allow analysis of sufficient depth
- Bibliography, which lacks in more than one of the following areas: organization, breadth, depth, and does not contain all the relevant references mentioned in class.

Additional Information for AR

All A+/A/A- grade assignment should comply with the highest performance of Discovery-oriented learning.

Part III Other Information

Keyword Syllabus

Technology, technological literacy, philosophy, philosophy of technology, science and technology studies, phenomenology, post-phenomenology, art/technology, art/science, technoscience, ethics, virtual worlds, mediated communication.

Reading List

Compulsory Readings

Title	
1	Dakers, J.R. (ed.). (2006). Defining Technological Literacy. Towards an Epistemological Framework. Palgrave McMillan. ISBN 978-1403983053.
2	Hayles, N. K.: How we became posthuman: virtual bodies in cybernetics, literature and narrative constructions. University of Chicago Press, 1999
3	Ihde, D.: Technology and the lifeworld: from garden to earth. Indiana UP, 1990 Postphenomenology and Technoscience. The Peking University Lectures. Suny Press, 2008 Heidegger's Technologies: Postphenomenological Perspectives. Fordham University Press, 2010 and Selinger, E.: Chasing Technoscience: Matrix for Materiality. Indiana UP, 2003.
4	Moran, D.: Introduction to Phenomenology. London & New York: Routledge, 2000
5	Scharff, R. C. and Dusek, V. (eds.). Philosophy of Technology. The Technological Condition. An Anthology. Chichester: Blackwell Publishing, 2003
6	Sicart, M.: Digital Games as Ethical Technologies. In: Sageng, J.R., Fossheim, H. and Larsen T.M. (eds.). The Philosophy of Computer Games. Philosophy of Engineering and Technology. Springer, 2012
7	Verbeek, P-P. What Things Do. Philosophical reflections on technology, agency, and design. The Pennsylvania State University Press, 2005
8	— Moralizing Technology: Understanding and Designing the Morality of Things. University of Chicago Press, 2012

Additional Readings

Title	
1	Harvey, P. et al. (eds.). (2014). Objects and Materials. A Routledge Companion. London & NY: Routledge. ISBN 978-1138899414
2	Selinger, E. (ed.). (2006). Postphenomenology: A Critical Companion to Ihde (Suny Series in the Philosophy of Social Sciences). Suny Press. ISBN 978-0791467886
3	Harman, G. (2010). Circus Philosophicus. Zero Books. ISBN 978-1846944000
4	Dreyfus, H.. (2009). An existential critique of Second Life In: On the Internet. Thinking in Action. (2nd Edition). New York: Routledge
5	Hayot, E. (2014). The Elements of Academic Style: Writing for the Humanities. Columbia UP.

Annex (for GE courses only)

A. Please specify the Gateway Education Programme Intended Learning Outcomes (PILOs) that the course is aligned to and relate them to the CILOs stated in Part II, Section 2 of this form:

Please indicate which CILO(s) is/are related to this PILO, if any (can be more than one CILOs in each PILO)

PILO 1: Demonstrate the capacity for self-directed learning

1, 2, 3, 4

PILO 2: Explain the basic methodologies and techniques of inquiry of the arts and humanities, social sciences, business, and science and technology

2, 4

PILO 3: Demonstrate critical thinking skills

1, 2, 3, 4

PILO 4: Interpret information and numerical data

1, 2, 3, 4

PILO 5: Produce structured, well-organised and fluent text

1, 2, 3, 4

PILO 6: Demonstrate effective oral communication skills

1, 2, 3, 4

PILO 7: Demonstrate an ability to work effectively in a team

2, 3, 4

PILO 8: Recognise important characteristics of their own culture(s) and at least one other culture, and their impact on global issues

1, 2, 3, 4

PILO 10: Demonstrate the attitude and/or ability to accomplish discovery and/or innovation

1, 2, 3, 4

B. Please select an assessment task for collecting evidence of student achievement for quality assurance purposes. Please retain at least one sample of student achievement across a period of three years.

Selected Assessment Task

Final paper on a topic relevant to the themes discussed in class (e.g. analysis of technology' s contribution to one' s discipline-specific practices, critical evaluation of a popular claim about a particular technology, or analysis of the impact of a particular technology on quality of life).