Name	**Biosphere & Technosphere – Speculative Transgressions in Contemporary Design Culture**	Classroom ☐
		Studio or workshop ☐
		External venue ☐
		Online ☐

Codes	*Kód helye*

Host	**Design Institute**

	Type	ECTS	Contact hours	Student work	Course type	Semester	Unit
Basic info	**Term mark**	**3 ECTs**	**22**	**38**	**seminar**	**2024/2025/1**	**MA2**

Recommen-dation

Short Description

Given the current scientific, technological, and ecological shifts, the line between the "artificial" and the "natural" is becoming increasingly blurred. This course seeks to explore speculative and critical design approaches that venture into the realm of the biological and the technological, often resulting in intriguing interactions between humans and non-human entities. These non-human agents can range from microorganisms and animals to machines and software. A central theme that unites the topics covered in this semester is co-creation with these entities and challenging the conventional user-centric perspective.

The course will delve into various subjects, including atypical interfaces, interactions between different species, biodesign, body hacking, wearable technologies, artificial intelligence, robotics, and space design. The analyzed projects will be discussed within a broader philosophical context. By elucidating related intellectual trends and concepts, such as posthumanism and transhumanism, the course aims to present a cultural cross-section that motivates students to contemplate their own design practice and research.

Teachers

Name	Contact information	Short bio	Open hours
Dr. Ákos Schneider	schneider@mome.hu		

Semester schedule

Course scheduling	Weekly class appointments
On Mondays	10.40-12.10

#	Date	Weekly educational content
1		Introduction
2		Speculative design, design fiction, critical design
3		Design beyond the user scale: hyperobjects and posthuman perspectives
4		Capitalist realism and circular design futures
5		Atypical interfaces: biomedia and biodesign
6		The body as designed object: cyborgs and transhumanism
7		Generative design: visions of the Singularity
8		Robotics and anthropomorphic interfaces
9		Terraforming and space design
10		Summary and reflections
11		
12		

13		
14		
15		

<table>
<tr><td>Requirements and evaluation</td><td>Assignments</td><td>Evaluation criteria</td><td>Deadline</td><td>% in evaluation</td></tr>
<tr><td></td><td>During the semester, each student is required to carry out research once on a given design project and present the results in a presentation. As part of the presentation, students will be asked to formulate two open questions that can serve as discussion starters for the whole group. Students will give direct feedback on each other's presentations along defined criteria.</td><td></td><td></td><td></td></tr>
<tr><td></td><td>Students are expected to actively participate in the seminar discussions (in most cases using the think-pair-share, the pro/con arguments or the Jigsaw-method)</td><td></td><td></td><td></td></tr>
<tr><td></td><td>Brief essay (1-2 pages), which connects at least three concepts discussed in class and includes four references cited according to academic standards</td><td></td><td></td><td></td></tr>
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Compulsory readings

Bratton, B. H., 2016. On Speculative Design. Dis Magazine. http://dismagazine.com/discussion/81971/on-speculative-design-benjamin-h-bratton/
Dunne, A., Raby, F., 2013. Speculative Everything: Design, Fiction, and Social Dreaming. Cambridge, Mass.–London: MIT Press.

Recommended readings

Bauwens, T., Hekkert, M., Kirchherr, J., 2020. Circular futures: What Will They Look Like?. Ecological Economics, 175. https://doi.org/10.1016/j.ecolecon.2020.106703
Berardi F., 2017. Futurability: The Age of Impotence and the Horizon of Possibility. London – New York: Verso.
Bleecker, J., 2009. Design Fiction: A short essay on design, science, fact and fiction. Near Future Laboratory, https://drbfw5wfj lxon.cloudfront.net/writing/DesignFiction_WebEdition.pdf
Bostrom, N., 2003. The Transhumanist FAQ. World Transhumanist Association. https://nickbostrom.com/views/transhumanist.pdf
Braidotti, R., Hlavajova, M. (eds.), 2018. Posthuman Glossary. New York: Bloomsbury Publishing.
Coles, A. (ed.), 2016. EP Vol. 2: Design Fiction. Berlin: Sternberg.
Colomina, B., Wigley, M., 2016. Are We Human?: Notes on an Archeology of Design. Zürich: Müller.
Dunne, A., Raby F, 2001. Design Noir: The Secret Life of Electronic Objects. Berlin: Birkhäuser.
Fisher, M., 2009. Capitalist Realism: Is There No Alternative?. London: Zero Books.

Forlano, L. 2017. Posthumanism and design. She Ji: The Journal of Design, Economics, and Innovation, 3 (1), pp. 16–29.

Haraway, D., 2016 [1985]. A Cyborg Manifesto: Science, Technology, and Socialist-feminism in the Late Twentieth Century. University of Minnesota Press. http://bitly.ws/M4t6

Harris, T., Raskin, A., 2023. The A.I. Dilemma - March 9, 2023. Youtube: Center for Humane Technology. https://www.youtube.com/watch?v=xoVJKj8lcNQ&ab_channel=CenterforHumaneTechnology

Joler, V., Pasquinelli, M., 2020. The Nooscope Manifested: Artificial Intelligence as Instrument of Knowledge Extractivism. AI and Society. https://doi.org/10.1007/s00146-020-01097-6

Lindley, J., Coulton, P., 2015. Back to the Future: 10 Years of Design Fiction. Proceedings of the 2015 British HCI Conference, 210–211.

Mitrovic, I., 2015. Introduction to Speculative Design Practice. In Introduction to Speculative Design Practice, eds. Mitrovic, I., Suran, O., Golub, M. Zagreb–Split: HDD & DVK UMAS, 8–23.

More, M., Vita-More, N. (eds.), 2013. Transhumanist Reader. Oxford: Wiley–Blackwell.

Moreno, M., De los Rios, C., Rowe, Z., Charnley F., 2016. A Conceptual Framework for Circular Design. Sustainability 8 (9). https://doi.org/10.3390/su8090937

Morton, T., 2013. Hyperobjects: Philosophy and Ecology after the End of the World. Minneapolis: University of Minnesota Press.

Myers, W., 2018. Biodesign: Nature + Science + Creativity. New York: Museum of Modern Art, Thames & Hudson.

Nayar, P. K., 2014. Posthumanism. Cambridge: Polity Press.

Norman, D., 2005. Human-Centered Design Considered Harmful. Interactions, July-August, pp. 14–19.

Oxman, N., 2016. Age of Entanglement. Journal of Design and Science. https://doi.org/10.21428/7e0583ad

Pepperell, R., 2003. The Posthuman Condition: Consciousness Beyond the Brain. Bristol: Intellect.

Read, L. E., 2018 [1958]. I, Pencil: My Family Tree as told to Leonard E. Read. Econlib. https://www.econlib.org/library/Essays/rdPncl.html?chapter_num=2#book-reader

Scharmen, F., 2019. Space Settlements. New York: Columbia University Press.

Schneider Á., 2022. Az emberközpontú tervezés határai: spekulatív design és poszthumán állapot. Budapest: Typotex.

Slavin, K., 2016. Design as Participation. Journal of Design and Science. https://doi.org/10.21428/a39a747c

SpeculativeEDU. https://speculativeedu.eu/

Sterling, B., 2005. Shaping Things. Cambridge, Mass. – London: MIT Press.

Wakkary, R., 2021. Things We Could Design: For More than Human-centered Worlds. Cambridge, Mass.– London: MIT Press.

Wizinsky, M., 2022. Design after Capitalism: Transforming Design Today for an Equitable Tomorrow. Cambridge, Mass.–London: MIT Press.

Learnings		
	Knowledge	Throughout the course students will gain insight into speculative, critical, experimental registers of contemporary design culture, while exploring ecological, technological and social trends that hold the potential to shape our future and challenge conventional notions of the designer's role and position.
	Skills	Students will develop their argumentation, debating and presentation skills. They will also increase their ability to think in complex systems.
	Attitude	Students will cultivate their critical and analytical thinking abilities, while fostering their collaborative skills and openness to inter- and transdisciplinary work.
	Responsibility	Students will carry out independent research and apply methods of design and artistic research. Subsequently, they will present their findings either individually or in pairs.

Exemption

☒ Exemption from attending and completing the course cannot be granted
☐ Exemption may be granted from the acquisition of certain competencies and the fulfilment of tasks
☐ Some tasks can be substituted with other activities,
☐ A full exemption can be granted

Curriculum connections

Unit	Parallel courses	Course proportion in unit

Emergent and experimental Design	Biosphere & Technosphere – Speculative Transgressions in Contemporary Design Culture	2 ECTs
	Design Collaborations	5 ECTs
	Speculative Design	5 ECTs
	Participative Design and Co-Creation	3 ECTs

Course prerequisites	Is it available as an elective?	Prerequisites in case of elective
Interaction Design Basics Market and Products	-	-

Misc. information