

## Research – Development – Innovation Syllabus

1. General Informations	Course title: <b>More-than-human placemaking for urban human-nature interactions</b>				
	Course coordinator(s) / lecturer(s): Kitti Butter, Maria Karyda, Sebastian Gschanes, Ádám Szabó				
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	Level and Code: M-KF-E-101-IK-242501-04	Position in the Curriculum:	Recommended semester: 1	Credits: 5	Teaching hours: 48 Student workload: 102
Related codes:	Type: lecture/ seminar/practice /combined	Is it open to sign-up as an elective?	Specific pre-conditions to sign-up as an elective:		
Interlinkages / prerequisites, parallel units:					
2. Targeting	<b>Aims and principles of the course:</b> (in accordance with the subject description)				
	<p>The course provides insight into the emerging field of 'more-than-human-centered' design, including its underlying motivations, theory, evolution, various current design contexts of application, and criticism. Students will learn about the potential that the built environment holds for non-human urban inhabitants, how urban (public) spaces and places can be welcoming to species beyond humans, and how, in turn, these environments are providing for human health and well-being. The focus will be on developing appropriate design responses to the complex challenges of urban biodiversity, with a focus on fostering positive human-nature interactions. Additionally, leveraging storytelling techniques, students will gain insights into the narratives shaping our understanding of non-human life within urban environments. During the course, lectures will be combined with various interactive elements, including group work and tasks, simulation games, and fieldwork. Additionally, students will gain a detailed understanding of the tools and mechanisms of systemic, context- and location-based design (e.g., sustainability indicators, ecosystem services, biodiversity surveys, and monitoring). Working collaboratively in groups, students will undertake project-based learning experiences centered around the design and implementation of habitats tailored to the needs of non-human species. These projects will integrate physical and digital elements, serving as both practical interventions and symbolic expressions of global sustainability principles. Through hands-on experimentation, participants will explore the potential of placemaking as a catalyst for cultivating ecological resilience and fostering deeper connections between citizens and their non-human counterparts. The course concludes with the presentation of prototypes or models created for the design concepts.</p>				
	<b>Intended learning outcomes / professional and transitive competencies:</b> (in accordance with the subject description)				
<p><b>Knowledge:</b> Students will become acquainted with sustainable design frameworks and will be able to differentiate between them in terms of expected results and consequences. They will understand the contradictions of 'sustainable design', see the shortcomings of our built environment, and be capable of moving them (in theory) towards sustainability and regeneration. They will learn about biophilic design and patterns, how and why designing with and for nature is indispensable when designing urban environments, and how (interaction) design can facilitate to position human-nature interactions in the context of mediated technologies.</p> <p><b>Skills:</b> They will gain practice in design research, design criticism, systems-based design, communication, rapid prototyping, as well as vision creation related to the topic.</p>					

	<p><b>Attitudes/attributes:</b> The learning content and exercises throughout the course serve to familiarize students with experiential sustainability (thought) experiments and facilitate designing along with context-appropriate sustainability goals.</p> <p><b>Autonomy and Responsibility:</b> Students will work in groups, and the production of the final project work will be a shared responsibility (as well as the homework assignments leading to the final project work).</p>
	<p><b>Course content</b> (topics and themes):</p> <ul style="list-style-type: none"> <li>- Ecological crisis, Limits of Earth's (ecological) capacity</li> <li>- Relationship between climate change and biodiversity crisis</li> <li>- Nature-based solutions and ecosystem services / human-nature interactions / biophilic patterns</li> <li>- Overview of design frameworks (sustainable, circular, ecological, and regenerative design)</li> <li>- More-than-human-centered design</li> <li>- Placemaking and urban habitat design / undesign movement</li> <li>- Data storytelling, data physicalization</li> <li>- Narrative storytelling</li> </ul> <p><b>RDI methods and tools used in the course:</b></p> <ul style="list-style-type: none"> <li>- more-than-human-centered placemaking methodology and toolkit</li> <li>- non-human personas</li> <li>- design research</li> <li>- regenerative design</li> <li>- urban spacemarkers</li> </ul>
3. Itinerary	<p><b>Specificity of the learning process:</b> emphasis on concept sketching and rapid prototyping</p> <p><b>Teaching method and Scedule:</b>  Weekly lectures with the course instructors and invited experts, followed by guided workshops for concept development, rapid prototyping and finalization of the project work and presentation. Students will work in groups.  Course structure based on the weekly sessions:</p> <ul style="list-style-type: none"> <li>- Introduction and theoretical foundation (1)</li> <li>- Context exploration (expert lectures) (3)</li> <li>- Design workshops: more-than-human habitat concept design with interactive spacemarkers (4)</li> <li>- Prototyping and modeling, finalization of project work (4)</li> </ul> <p><b>Tasks and assignments (with student notional workload):</b></p> <ul style="list-style-type: none"> <li>- Mandatory reading/viewing of a chosen literary/film work related to the relationship between humans and nature</li> <li>- Research on a chosen animal/plant species' lifecycle and exploration of the possibilities provided by the built environment: demonstrating complex thinking and a critical approach to the gathered data and processes</li> <li>- Design of a creative habitat concept, including sketches of the habitat and its supporting environment, as well as its spatial representation (spacemaker)</li> <li>- Evaluation and selection of design ideas through regular (short) presentations and consultations</li> <li>- Prototyping using chosen materials and tools</li> <li>- Presentation of the final result</li> </ul>

	<p><b>Learning environment:</b> The course is held in the Innovation Center Coworking space on the 3rd floor, occasionally on the campus.</p>
4. Evaluation	<p><b>Assessment:</b></p> <ul style="list-style-type: none"> <li>- Textual and visual presentation of the creative process leading to the design of an environment or product that aids the chosen animal/plant species' lifecycle</li> <li>- For the final presentation, the more-than-human-centered habitat concept must be completed, presented live by the student or team.</li> <li>- Additionally, it should be presented through a prototype created using chosen tools</li> <li>- Minimum of 2 images and accompanying text to be shared on social media platforms</li> </ul> <p><b>Assignments:</b></p> <ul style="list-style-type: none"> <li>- main assignment: group project work</li> <li>- breakdown of weekly steps: <i>*more could be added</i> <ul style="list-style-type: none"> <li>o read the Campus biodiversity report and do a quick research on the history of Zugliget and the site (MOME Campus)</li> <li>o create your non-human persona profile for the chosen species, do background research, identify challenges</li> <li>o draft design concept (iterations)</li> <li>o 10 min. mid-course presentation about your design concept</li> <li>o studio work and prototyping (iterations)</li> <li>o final presentation (poster and prototype/model)</li> </ul> </li> </ul> <p><b>Assessment method:</b> Assessment based on the presentation and submitted materials. Personal attendance during classes and workshops (or absences) will also be taken into account.</p> <p><b>Assessment criteria:</b></p> <ul style="list-style-type: none"> <li>- The extent to which the task solution aligns with the assignment: how deeply the designer or team explored the life cycle and capabilities of the given species in terms of design, and how they can apply them in the design process.</li> <li>- The pragmatic, usable yet provocative and thought-provoking quality of the presented concept.</li> <li>- The visual quality of presenting the concept.</li> <li>- The level of detail and quality in developing the prototype.</li> <li>- Overall view of the design study – presentation of the concept, its visual and verbal communication, etc.</li> </ul> <p><b>Calculation of grade:</b> (weights of the achievements, assignments; ranges of rates or points)</p> <ul style="list-style-type: none"> <li>- Attendance in classes, active contribution to discussions, workshops (40%)</li> <li>- Course project (concept design and realization) (40%)</li> <li>- Final presentation (20%)</li> </ul> <p><b>Prior learning recognition</b> (based on application): N/A</p> <p><b>Recommended readings:</b></p> <p><i>Student must select either a film that deals with the relationship between humans and nature, or a literary work.</i></p> <p>Recommendations:</p> <ul style="list-style-type: none"> <li>- The Hidden Life of Trees (2020)</li> </ul>

	<ul style="list-style-type: none"> <li>- Planet Earth (2006) – BBC TV series</li> <li>- David Attenborough: A Life on Our Planet (2020)</li> <li>- March of the Penguins (2005)</li> <li>- The Salt of the Earth (2014)</li> <li>- My Octopus Teacher (2020)</li> <li>- All That Breathes (2022)</li> <li>- The Elephant Whisperers (2022)</li> <li>- Whale Rider (2002)</li> <li>- Kiss the Ground (2020)</li> <li>- Dolphin Man (2017)</li> </ul> <p>OR</p> <p><i>Students must select a literary work that deals with the relationship between humans and nature.</i></p> <p>Recommendations:</p> <ul style="list-style-type: none"> <li>- Bill Laws (2010) 50 Plants That Changed the Course of History</li> <li>- Peter Wohlleben (2021) The Hidden Life of Trees</li> <li>- Helen Bostock - Sophie Collins (2012) How Can I Help Hedgehogs?</li> <li>- Douglas Adams - Mark Carwardine (2000) Last Chance to See</li> <li>- Jonathan Franzen (2019) The End of the End of the Earth</li> <li>- Elizabeth Kolbert (2016) The Sixth Extinction</li> <li>- Lucy Cooke (2019) The Unexpected Truth About Animals</li> <li>- Robin Wall Kimmerer (2015) Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants</li> <li>- Robin Wall Kimmerer (2021) Gathering Moss: A Natural and Cultural History of Mosses</li> <li>- George Monbiot (2022) Regenesiis: Feeding the World Without Devouring the Planet</li> <li>- Joshua Trey Barnett (2022) Mourning in the Anthropocene</li> </ul> <p>Further readings, documents, sources: N/A, all materials will be provided during the course.</p>
	<p><b>Additional information:</b> The course is based on one of the ongoing research projects of the Innovation Center Data Storytelling Hub. Students have the opportunity to gain insight into the daily life and processes of research and, in case of deeper interest, to participate in research work beyond the course.</p> <p><b>Schedule and venue for personal consultation:</b> Thursday afternoon, MOME UP 315</p>