Creative Technology

Creativity and Technology in MDP

Although each curricular piece of MDP has a distinct emphasis and pedagogical approach, a critical investigation of technology's creative potential runs through the entire MFA program. In other words, the Creative Technology classes are not the only place in MDP that deals with 'creative technology,' in theory and in practice. As students advance through the program, culminating a thesis project, they will:

- Strategically identify, evaluate and integrate existing technologies into their creative practice
- Grasp fundamental CS concepts of algorithmic thinking, data, physical and spatial computing, so they can critically craft prototypes, prompts and probes across a range of canvases
- Identify and adopt the appropriate level of fidelity for their creative practice, i.e. know which platforms and level of functionality are relevant to discovery, experimentation, concept ideation, proof of concept and development
- Situate and craft the appropriate and relevant type of project for their creative practice, e.g. proof of concept through functional prototype, as strategically necessary
- Research, understand and critically evaluate the implications of existing and emerging technologies in the framework of social, ethical, economic, HCI and art/design and aesthetic ecologies.
- Self-direct their learning and adoption of new technologies through studio, labs, mentorship, online, self-study, etc.
- Communicate and collaborate with technology domain experts
- Align technology as a mode of inquiry with conceptual framing

Structure of Creative Technology *class*

The Creative Technology class consists of two parallel parts: a weekly seminar, and a series of hands-on creative projects. The seminar and projects are run as separate entities, but sometimes there is a topical alignment between them.

1. **CT Seminar** introduces relevant domains, concepts, methods, critical positions, through presentation and discussion of readings, projects and practices. The syllabus is diverse but focused, and draws from fields of Interaction Design, Interactive Media Arts, and Science Technology Society studies (STS).
2. **CT Projects** focuses on engaging with technology as a generative exercise ("making to think"). Each project lasts 1-3 weeks, and typically comprises practical workshops framed within an open-ended creative brief. The projects are designed to allow students to dive in and create, regardless of their level of experience and familiarity working with code or electronics. The projects are open to all MDP students, space permitting.

Working Culture, Assessment

Although the Creative Technology class includes weekly assignments and a fair amount of specific technical instruction, it is primarily organized to be a 'creative workshop,' where students can experiment and contemplate technology as part of their practice, as well as a space to review lots of technology-related work by other designers and artists. Projects will have deadlines with presentations and critical discussions, but we de-emphasize these events as major delivery milestones. (This does not mean we do not expect students to produce some formally and conceptually refined pieces at several points in their journey through this class.) We are concerned, primarily, about how students are documenting and reflecting on their investigations as they go along. At the start of the term, students will set up a GitHub repository, which they will use as a space for this.

Course name, ref	Creative Technology 1 – GMDP-516-04
Instructors	- Ben Hooker ben.hooker@artcenter.edu - Maxim Safioulline maxim.safioulline@artcenter.edu - plus class guests, guest project and workshop instructors - Nanyi Jiang, TA
Program Learning Outcomes (PLOs)	(1) Design - Define new design opportunities/territories through research and engagement with diverse social, cultural and technological contexts. Demonstrate an advanced ability to design and communicate across a range of media and modalities. Create work that engages a range of theoretical and applied domains. (2) Practice - Construct a personal process and employ methodologies that support critical reflection, self-learning, agility, and taking informed risks. Assemble a body of work that interrogates specific interests and domains through design. Productively frame and argue for one's design endeavours in the context of present and future critique. (3) Influence - Exercise design and thought leadership by contributing to disciplinary discourse, arguing for new practices and initiating dialogues within new domains through design.
Course Learning Outcomes (CLOs)	- Critically reflect on the role of technology in design and culture from a range of perspectives, and apply the resulting insights in ways that synthesize design and technology with a point of view - Integrate multiple technologies into creative projects - Engage with technologies as a creative, generative process
Materials costs	We will primarily use open source and free-to-use software, and familiar household materials. For more involved electronics projects we will endeavor to use components and from the department's own equipment/supplies store but some projects might entail additional purchase of components/supplies under $50 total.
Instruction/Work	- Seminar, every week: 1-2 hour discussion/presentation with 1-2 hours homework - Project, varies; weekly average: 2 hours project/workshop time (average) with 2+ hours independent work
Grading criteria	50% – level of participation, both in class discussion and in the associated online spaces we will set up; level of controlled risk-taking, experimentation, learning new tools and approaches, including self-learning 50% – level of comprehension of class project objectives and principles demonstrated in work produced; level of appropriate creative rigor

Outline Schedule* (all times Pacific Time)

FALL 2020			
Wk	**CT Seminar** Fri 09:00-11:00	**CT Projects** Fri afternoon & occ. Sat	Check-in meeting Tue 22:00-23:00
1	*tools*		
2	*more tools*	***CREATIVE KLUGING***	
3	*internet/crowdsourced art*		
4	*computer-based simulations*	***WORLDBUILDING–SIMULATION***	
5	*interactive installation*		
6	*data and datasets (+ event)*		
7			
8	*electromechanical systems*	***IoT–CREATURE–ECOSYSTEMS***	
9	*hacking and repurposing*		
10	*IXD principles and methods*		
11	*generative and algorithm. art*	***ALGORITHMIC–VISUAL EXPRESSION***	
12	*networks*		
13	*musical interfaces*		
14			
SPRING 2021			
Wk	**CT Seminar** Fri morning	**CT Projects** TBD	Check-in meeting TBD
1	*human body*	***CONVERSATIONS WITH COMPUTERS***	
2	*automation*		
3	*ethics*		
4	*open source*	***TEXTILES***	
5	*textiles*		
6	*artificial intelligence*		
7			
8	*games*	***IMMERSION***	
9	*smart city*		
10	*cryptocurrency*		
11	*more artificial intelligence*	***BODY AS INPUT AND OUTPUT***	
12	*mediated realities*		
13	*post-human*		
14			

*During the first couple of weeks, we will likely adjust this sequence in response to the experience levels and interests of the group, and opportunities to accommodate guest speakers and workshops.