UNIVERSITY of NICOSIA

Course Syllabus

Course Code	Course Title	ECTS Credits
MUTX-345	Performing with Computers	6
Prerequisites	**Department**	**Semester**
MUTX-140; MUTX-201; MUTX-202	Music & Dance	Fall/Spring
Type of Course	**Field**	**Language of Instruction**
Thematic Area	Music Technology	English
Level of Course	**Lecturer(s)**	**Year of Study**
1st Cycle	Dr. Haris Sophocleous	4th
Mode of Delivery	**Work Placement**	**Corequisites**
Face-to-face	N/A	N/A

Course Objectives:

The main objectives of the course are to:

- Explain and support various techniques for live performance with computers
- Explore several performance metaphors: interactive, multimedia, installation, DJ.
- Engage with a broad array of software and hardware combinations with a special focus on their potential creative use.
- Describe 'sound art' and examine works by a variety of artists of the 20th Century that have created significant relationships between the aural domain and other areas of thought.

Learning Outcomes:

After completion of the course students are expected to be able to:

- Formulate compositional methodologies for the creation of interactive sound and live performance projects.
- Build a software interface that allows effectively to perform a work live.
- Build a hardware interface that allows effectively to perform a work live.
- Strengthen their technical background.
- Create an installation piece that operates continuously in relation to the physical space.

Course Content:

- Overview of sound as art (Futurists, Varese's liberation of sound, etc.)
- Brief introduction to acoustics and psychoacoustics.
- Methodologies, approaches and techniques in the organization of sound.
- Indeterminacy and algorithmic composition (Chance compositions, indeterminate structures and form, OpenMusic, AudioMulch, PureData, etc.)
- Real-time interaction (with dancers, with acoustic instruments, etc.)
- Live sample triggering (Ableton Live, SoundPlant, Battery).
- No-input mixer and sound manipulation.
- IC (integrated chipset) and circuit creation.

Learning Activities and Teaching Methods:

Lectures; Discussions; Student participation; Interactive Projects

Assessment Methods:

Attendance; Class assignments; Interactive Project No.1; Interactive Project No.2; Interactive Project No.3

Recommended Textbooks / Readings:

Title	Author(s)	Publisher	Year	ISBN
The Music Technology Cookbook	*Adam Patrick Bell*	Oxford University Press	2020	9780197523889
Playing with Something That Runs	*Mark J. Butler*	Oxford University Press	2014	9780195393613
Experimental Music: Cage and Beyond: 2nd Edition	Michael Nyman	Cambridge University Press	1999	978-0521653831
El. Music and Sound Design-	Alessandro Cipriani &	Contemponet	2013	978-8890548451

Theory and Practice with Max and Msp: Vol.1	Maurizio Giri			
On Sonic Art	Trevor Wishart	Routledge	1996	978-3718658473
The Theory and Technique of Electronic Music	Miller Puckette	World Scientific Publishing Co. Pte. Ltd.	2006	http://msp.ucsd.edu/techniques/v0.11/book.pdf