



## Course Syllabus

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

### Course Objectives:

The main objectives of the course are to:

- Familiarize the students with the 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.
- Explore 'sound art' and examine works by a variety of artists of the 20<sup>th</sup> 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:

- 1) Formulate compositional methodologies for the creation of interactive sound and live performance projects.
- 2) Build a software interface that allows effectively to perform a work live.
- 3) Build a hardware interface that allows effectively to perform a work live.
- 4) Demonstrate their technical background.
- 5) 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

**Recommended Textbooks / Readings:**

Title	Author(s)	Publisher	Year	ISBN
Experimental Music: Cage and Beyond: 2 <sup>nd</sup> Edition	Michael Nyman	Cambridge University Press	1999	978-0521653831
El. Music and Sound Design- Theory and Practice with Max and Msp: Vol.1	Alessandro Cipriani & Maurizio Giri	Contemponet	2013	978-8890548451
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	<a href="http://msp.ucsd.edu/techniques/v0.11/book.pdf">http://msp.ucsd.edu/techniques/v0.11/book.pdf</a>