DEREE COLLEGE SYLLABUS FOR:	
HFP 2205 LE The Sound of the Future: Sonic Fiction, Science Fiction and Creative Coding　　　**3/0/3**	
New course Fall 2016	
PREREQUISITES:	WP 1010 Introduction to Academic Writing WP 1111 Academic Writing and Ethics
CATALOG DESCRIPTION:	An interdisciplinary exploration of sound in new media art. The course will be based on Kodwo Eshun's concept of *sonic fiction* (the point where sound and science fiction intersect), in order to provide a framework for discussion of the cultural and aesthetic dimensions of new media art. In parallel, students will have a hands-on experience of creative computer coding, with the aim of implementing technology to give creative expression to their experience of selected science fiction texts. The course does not assume prior knowledge or experience of artistic creation or computer coding. Emphasis is placed on experiential learning, and for this reason class meetings take place in a computer lab.
RATIONALE:	There is a rich tradition of innovation within new media art that has brought together musicians, artists, scientists and engineers. One of the richest areas of current practice in the field focuses on the activity of creative coding – the writing of code that generates art. Alongside this practical approach, Eshun's *sonic fiction* represents an engaging cross-disciplinary attempt to provide context to these activities. This course aims to equip students with a theoretical and practical familiarity with these ideas and artistic genres, in order to better enable them to make sense of current and future developments in cross-disciplinary artistic practice. The main focus of the course will be on developing closely integrated creative and technical skills in the context of a general understanding of the creative approaches within the field.
LEARNING OUTCOMES:	Upon successful completion of this course, students should be able to: 1. Appraise the key creative ideas and stylistic contexts of a range of sound-based new media art works, assessing them through analytical listening and analysis of relevant ideas and stylistic contexts, both orally and in writing; 2. Demonstrate understanding of the transcultural artistic and social contexts of new media art; 3. Apply practical coding skills in the creation and manipulation of sound material via the creation of original computer code; 4. Compose a piece of sound-based new media art by making effective use of technical tools to achieve artistic aims; 5. Examine the intersections of music, literature, and creative technologies.
METHOD OF TEACHING AND LEARNING:	In congruence with the teaching and learning strategy of the college, the following tools are used: • Close informed listening, class discussion, workshop-style pair work and group work during class meetings; • Active student-centered teaching approach in the presentation of course material to engage learners; • Critical-thinking exercises and learning activities designed to help students acquire confidence and benefit from independent study; • Student presentations of learning material to encourage involvement in the learning process; • Co-curricular activities, ranging from collaboration with student clubs and societies to debates and event organizing, in order to encourage students' creative engagement with the material; • Extensive instructor feedback on assignments and activities;

	• Individualized assistance during office hours for further discussion of lecture material, additional reading, and assignments; Additional print and audio-visual educational material posted on the Blackboard course template.
ASSESSMENT:	**Formative:** <table><tr><td>Regular 'Take-Home' Coding Projects</td><td></td></tr></table> **Summative:** <table><tr><td>Creative Coding Project</td><td>40%</td></tr><tr><td>Reflective Journal</td><td>20%</td></tr><tr><td>Presentation</td><td>20%</td></tr><tr><td>Participation</td><td>20%</td></tr></table> Assessment features a range of assignments that aim at allowing students to build their academic understanding in parallel with their creative and technical skills. Considerable course time will be dedicated to guiding and supporting students in the selection of their project. The formative 'Take-Home Coding Projects' aim to prepare students for the main 'Creative Coding Project' and the 'Reflective Journal'. The Reflective Journal and Presentation test Learning Outcomes 1, 2, and 5. The Creative Coding Project tests Learning Outcomes 3, 4, and 5.
INDICATIVE READING:	**REQUIRED READING:** Cox, Christoph and Warner, Daniel (2004) *Audio Culture: Readings in Modern Music.* London: Continuum. Eshun, Kodwo (1998) *More Brilliant than The Sun: Adventures in Sonic Fiction.* London: Quartet Books. Hendy, David (2014) *Noise: A Human History of Sound & Listening*. London: Profile Books. Kahn, Douglas (2001) *Noise, Water, Meat: A History of Sound in the Arts*. Cambridge: MIT Press. **RECOMMENDED READING:** Albiez, Sean and Pattie, David (eds.) (2011) *Kraftwerk: music non-stop.* New York: Continuum. Holmes, Thom (2012), *Electronic and Experimental Music: Technology, Music and Culture*, New York: Routledge. Kelly, Caleb (2009) *Cracked Media: The Sound of Malfunction*, Cambridge MA: MIT Press LaBelle, Brandon (2008) *Background Noise: Perspectives on Sound Art*. New York: Continuum. Maconie, Robin (2005) *Other Planets: The Music of Karlheinz Stockhausen*. New York: Scarecrow Press. Miller, Paul D. (ed.) (2008) *Sound Unbound: Sampling Digital Music and Culture.* MIT Press Roads, Curtis (1996) *Computer Music Tutorial.* MIT Press

Schaeffer, Pierre (2013) *In Search of a Concrete Music*, trans. North, C. and Dock, J., University of California Press.

Shapiro, Peter (ed.)(2000) Modulations. *History of Electronic Music: Throbbing Words on Sound*. New York: Caipirinha Productions

LISTENING LIST:

Close informed listening will be an integral part of the course. A detailed listening list will be provided by the course instructor at the beginning of the teaching period, together with guidance about how to find and access this material. Wherever possible, listening material from the list will be hosted on the Blackboard site for the course.

Listening material will be drawn from the following works (including soundtracks from science fiction films):

- Bernard Parmegiani, *Rouge Mort: Ultime Danse*, 1964
- Edgar Varèse: *Poème électronique*, 1958
- György Ligeti, *Artikulation*, 1958
- Halim El-Dabh, *The Expression of Zaar*, 1944
- Herbert Eimert and Robert Beyer, *Klangstudie II*, 1952
- Herbie Hancock, *Future Shock*, 1983
- Iannis Xenaiks, *La Legende d'Eer*, 1977-78
- Jean-Claude Rissett, *Mutations I*, 1969
- John Cage, *Imaginary Landscape No. 1*, 1939
- John Coltrane, *Interstellar Space*, 1967
- Karlheinz Stockhausen, *Gesand der Junglinge*, 1954
- Karlheinz Stockhausen, *Kontakte*, 1958-1960
- Kraftwerk, *Radioactivity*, 1975
- Kraftwerk, *Computer World*, 1978
- Laurie Andreson, *Language of the Future*, 1984
- Louis and Bebe Barron, *Forbidden Planet* (soundtrack), 1956
- Max Mathews, *Numerology*, 1960
- Miles Davis, *Bitches Brew*, 1970
- Ornette Coleman, *Science Fiction*, 1971
- P. Schaeffer and P. Henry, *Symphonie pour un homme seul*, 1949-1950
- Pauline Oliveros, *Bye bye butterfly*, 1967
- Pierre Schaeffer, *Cinq études de bruits*, 1948
- Ridley Scott, *Alien* (soundtrack) 1979
- Ridley Scott, *Bladeruner* (soundtrack) 1982
- Steven Lisberger, *Tron* (soundtrack) 1982
- Vangelis, *Blade Runner* (soundtrack), 1982
- Verhoeve, Paul *RoboCop* (soundtrack) 1987
- Wendy Carlos, *Tron* (soundtrack), 1982

SCIENCE FICTION TEXTS:

A selection of science fiction texts will be used in the course. These will be drawn from classic works (examples listed) and new contemporary writing available online.

- Bradbury, Ray (1950) *The Veldt*
- Vonnegut, Kurt (1961) *Harrison Bergeron*
- Forster, E.M. (1909) *The Machine Stops*
- Asimov, Isaac (1941) *Nightfall*
- Asimov, Isaac (1950) *I, Robot*

COMMUNICATION REQUIREMENTS:	Written work and presentations should conform to standard academic norms of formatting, presentation and citation, and should be produced in Microsoft Word, Microsoft PowerPoint or the freely available equivalents from Open Office.
SOFTWARE REQUIREMENTS:	The course aims to use freely available software as widely as possible, allowing students to be able to install on their home machines (PC or Mac) the tools used in the course. • *Reaper* from http://www.reaper.fm (running in free non-registered evaluation mode) • *PureData* from www.puredata.info • IntegraLive from http://www.integralive.org • MaxMSP from www.cycling74.com (running in free runtime mode) • *Microsoft Word* and *PowerPoint* or the *Open Office* equivalents
WWW RESOURCES:	Students will be encouraged to explore widely to discover the vast range of sound art and new media art practice underway today. Extensive use will be made of UbuWeb (www.ubuweb.com), SoundCloud (www.soundcloud.com) and Vimeo (www.vimeo.com). There are also extensive tutorials and support material available on each of the software sites listed in the software requirements section.
INDICATIVE CONTENT:	**New Media Art:** • Creating using computers – new means of expression • 'Digital' thinking – abstract structures and artistic works • Media art as a transcultural practice **Sound and New Media Art:** • The rise of noise-based practices in music • Schaeffer and acousmatic listening • Cage and sound/silence • Music vs. sound art **Science & Sonic Fiction:** • Kodwo Eshun and sonic fiction • Science in science fiction – the creative use of real and fictitious science • Foley and music in science fiction films **Creative Coding** • The history of artists who code • Representing & manipulating sound in code • Constructing artistic form and structure through code