



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

Swansea
College of Art
Founded 1853

School of Fine & Media Arts

BA Music Technology

Sound Design



LEVEL 4

2018-19

Module Title: Sound Design

Module Code: Level 4

20 Credit Module

Lecture Room: AA207 (Alex Second Floor)

Thursday 9-1 (Semester 1)

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SYLLABUS

The learning and teaching strategy addresses the need for students to develop an imaginative approach to the genesis of new sound. The intention is therefore to equip the student with a solid foundation of theoretical and practical knowledge that can be flexibly deployed in different production contexts. Lectures will introduce the students to the underlying theories, concepts, and practice principles associated with the art of designing and manipulating sound objects. Workshops in the studio and lab will lead students through applications of project techniques in exercises designed to facilitate the acquisition of practical knowledge and skills. The training will provide the students with flexibility in approach to the changing nature of music technology, the ability to transfer skills to different studio environments, and the aptitude to assimilate the musical potential of new creative sound manipulation resources. The module takes the student through the process from the initial sound idea, through creative manipulation, to non-linear compositional technique and presentation.

- Sample processing
- Audio manipulation techniques
- Tools for creative transformation in the frequency and time domain
- Granular synthesis
- Spectromorphology of sound
- Concrete sound
- Microsonic techniques.
- Composite textures
- Non-linear sequencing and arrangement techniques.
- Techniques of expansion and variation, macro_ and micro_ structures
- Discerning digital signal effect processing, spatial elements and perspective through mixing
- The role of psychoacoustics, focusing and maintaining the listener's attention
- Musical ideas and expressive range

AIMS

- To develop the student's creative approach to the advanced potential of electronic sound.
- To maximise and extend the student's studio resources and techniques for the realisation of creative projects.

LEARNING OUTCOMES

Upon the successful completion of this module, the student should be able to demonstrate the ability to:

- 1 Demonstrate a proficiency, confidence and imagination in employing music technology studio facilities and techniques in the realisation of creative assignments.
- 2 To design and capture new sound objects, and to demonstrate the ability to implement them into a structured composition.

MODULE EVALUATION

At the end of the module you will be asked to complete a module evaluation form. Please refer to the learning outcomes when making your evaluation.

TIMETABLE

The course is taught over a twelve week period, starting in week one of semester one. The first two hours of each session will involve listening, analysis, case studies, theory, software presentations. The following two hours will be practical sound design workshop. Towards the end of the module, there will be class time allocated for students to work on the assignments. There will be a feedback and tutorial week in week six. There will be a peer feedback week in week 10, and a final feedback session in week 12.

BIBLIOGRAPHY

Essential

- | | |
|-----------------------|--|
| Pohlmann, K (2005) | <i>Principles of Digital Audio</i> . McGraw Hill. |
| Russ, M. (2008) | Sound Synthesis and Sampling. Focal Press. |
| Farnell, A., (2009) | <i>Designing Sound</i> . MIT Press. |
| Emerson, S (ed)(2008) | The Language of Electroacoustic Music (Palgrave Macmillan) |
| McConie, R (2000) | Music and Science (Oxford) |
| Troop, D : (2001) | Ocean of Sound (Serpent's T ail) |
| Wishart, T: (1996) | On Sonic Art (Routledge) Ed |

Recommended

- | | |
|-------------------------------------|--|
| Guernin, R. (2005) | MIDI Power - The Comprehensive Guide. Course Technology Inc. |
| Miranda, E.R. (2001) | Composing Music with Computers. Focal Press |
| Rossing, Wheeler &
Moore (2002) | The Science of Sound. Addison Wesley |
| Savage, T. M. &
Vogel, K. (2013) | An Introduction to Digital Multimedia. Jones and Bartlett |

Journals

Computer Music
Future Music
Sound on Sound

Websites

<http://www.sospubs.co.uk>
<http://www.csounds.com>
<http://puredata.info/>
<http://crca.ucsd.edu/~msp/software.html>
<http://supercollider.sourceforge.net/>
<http://www.cycling74.com/>
<http://www.essl.at/>
<https://ccrma.stanford.edu/>
<http://www.computermusic.org/>

COURSE OUTLINE

Week:	Date:	SOUND DESIGN
1	4th Oct	Introduction to module and assignment hand out. Introduction to Morphology of sound.
2	11th Oct	Listening session. Case study of sound manipulation Software and technique.
3	18th Oct	Theory of the sound object. Software and technique.
4	25th Oct	Prepared instrument recording session. Software and technique.
5	1st Nov	FEEDBACK TUTORIAL WEEK
6	8th Nov	Compositional exercise workshop. Non-linear arranging techniques.
7	15th Nov	Software evaluation of tools for creative transformation in the frequency and time domain .
8	22rd Nov	Composition
9	29th Nov	Composition
10	6th Dec	<i>Assessment Submission Deadline</i>
11	13th Dec	Group seminar- Peer Listening and anlysis of student compositions
12	10th Jan	Feedback to students and module evaluation

ASSESSMENT Synopsis

Coursework 100%

Composition:

The student will be required to submit a mastered stereo composition for fixed media, (4-6 minutes duration) employing the creative tools and techniques explored in the taught sessions.

FEEDBACK

Feedback is an essential part of all education and training programmes. It helps learners to maximise their potential at different stages of training, raise their awareness of strengths and areas for improvement, and identify actions to be taken to improve performance.

Feedback can be seen as informal (for example in day-to-day encounters between teachers and students or trainees, between peers or between colleagues) or formal (for example as part of written or clinical assessment). However, there is no sharp dividing line between assessment and teaching in the area of giving feedback on learning. Feedback is part of the overall dialogue or interaction between teacher and learner, not a one-way communication.

During your studies you will therefore receive feedback in many ways, including the following:

- Dialogue between teachers and students in formal classes
- Direct questions and responses from teachers inside and outside formal classes
- Email correspondence between teachers and students
- Interactions between students and teachers using Moodle
- Informal comments and responses to work undertaken in classes
- Comments and annotations added to written submissions, such as essays and reflective journals
- Formal written feedback in response to assignments recorded on the summative assessment module feedback forms