# **Coursework commentaries 2015–16**

#### CO3346 Sound and music

## **General remarks**

This course is structured on a topic basis through the subject guide. The coursework assignments this year were designed to allow students to explore a particular topic in more depth, and to produce a sonic artefact as the outcome of their investigation.

The overall topic this year was algorithmic approaches within the area of music and sound creation. The first coursework assignment involved exploring background material in this area and becoming more familiar with key topics, while the second coursework assignment required the creation of a sonic artefact, developed in an algorithmic way.

Examiners expect a high-quality response to questions, appropriate to the final level of the degree programme. Students are also expected to perform more independent work in order to achieve the requirements of the assignments, and to be able to submit reports and essays of high quality. This year, there were a small number of excellent submissions in both assignments, but there were also a disappointing number of mediocre ones, especially for the first coursework assignment where it seemed that students did not make the effort to read broadly. This resulted in essays that were focused very narrowly and, correspondingly, for the second coursework assignment, in artefacts that were not especially creative. It is extremely important that students investigate the subject matter in depth, and do not simply follow what seems to be the easiest path to submitting work

Additionally, some students lost marks for not following the required submission format. Up to five marks were deducted for work that was not of the correct format, which is an unnecessary way to lose points. Examiners require the work to be submitted a particular way in order to be able to mark it efficiently. Submitting work as a .doc file, when asked for a .pdf, is an example of not following the instructions.

## Coursework assignment 1: Algorithmic approaches to music creation

For this coursework, students were expected to develop a deeper understanding of algorithmic approaches to making creative artefacts and, in particular, in making music. In general, the better submissions were ones that included reference to a range of appropriate sources, correctly cited.

Part A involved learning more about the area, by reading various sources and answering questions about particular topics.

# **Comments on specific questions**

#### Part A

#### Question 1

Part A, question 1 was generally attempted reasonably well, although there were also weaker responses. On the weaker end, some students simply found one definition by one author, and presented this. Better answers found a few different approaches, and contrasted these.

#### Question 2

Question 2 required deeper understanding, and again some good answers were given. The better ones clearly showed that algorithmic composition predates computer approaches, with the most popular example being Mozart's Game of Dice. Other approaches were also given, including starting with Pythagoras, in addition to Haydn and other composers. Overall, clearly explaining that what makes such composition algorithmic is a step-by-step approach, rather than an intuitive one, is essential. Then, mentioning that computational technology can be used at various points in the implementation of the algorithms, in a computational approach, is the next step.

#### **Question 3**

For question 3, it was important to mention significant researchers in the area, and examiners were expecting students to understand the main achievements and main stumbling blocks in the area, and to describe them. This was rather weakly done in general.

#### **Question 4**

Question 4 was mostly answered well, although not all answers explained why the papers chosen were considered significant. Please remember to reference correctly.

#### **Question 5**

Question 5 was more challenging. There was no right or wrong answer, but analysis, argument, justification and substantiation of whichever viewpoint was presented, was essential. A particularly good response might set out Collins' (2008) view that algorithmic composition is composition once removed, and explore similarities between generative and algorithmic composition (both require human ingenuity to initiate the process, an amount of control is relinquished in each case and both invite human intervention at their outset (notwithstanding different approaches, e.g. Xenakis, Eno)). Collins (2008) states that generative music has come to mean algorithmic music that outputs in real time, and reads von Am as excluding human computation in defining generative output. This makes generative composition an inherently offline process, first composing the software, so the software can compose the music. This, of course, excludes live coding from generative composition, despite their use of generative processes. The conclusion is that while there are some differences between algorithmic and generative approaches, separating the two in practice is problematic. Several students commented that Eno's (1996) view of what generative music is blurs any distinction.

#### Part B

#### Question 1

Part B was made up of two parts. Question 1 required an in-depth analysis of a choice of one of three papers. Most students managed to read and understand the gist of the paper they had chosen, but many did not provide anything beyond a summary of the paper itself. To score well, examiners were expecting some analysis and critique. This could be in the form of comparisons with other work and other papers, or a discussion of any weaknesses (or indeed particular strengths) of ideas within the paper.

#### Question 2

Question 2 involved further analysis, requiring students to construct an argument based on a viewpoint substantiated by evidence. Quite a few students omitted this part, which was a pity as this is an important skill to acquire. However, some of the attempts were of a high quality, with a few students obtaining full marks for their responses. Full marks do not mean that what has been submitted is the definitive correct answer (as might be the case for a mathematical calculation, for example), but that a strong viewpoint has been presented, covering all aspects required, and properly justified by published evidence. Weaker attempts showed some of the following misunderstandings: accepting that algorithmic and generative approaches have minimal human interaction without questioning this claim, and arguing that this aspect meant that they are different from live coding. Not all students understood that live coding often involves changing or modifying parts of an algorithm, in real time. Finally, the assumption that stochastic processes are necessarily random was a mistake made by many.