
Preface

At level 3, the Creative Computing programme has two emphases: audio and visual. *343 Computing art and image effects* focuses on the visual, while this course is about audio.

The approach taken in our study of the subject is a topic-based one. Each chapter of this study guide focuses on one of five areas within the field of digital sound, and looks at it with a creative perspective.

At level 3, you are expected to understand topics more deeply, and to be able to make the connections between different areas. The big picture is not painted explicitly by the authors of the guide; you are expected to do some of this yourself, to obtain a broad appreciation of the material and its links.

You should read widely; you should not read only this subject guide and the explicit readings that it lists, but you should also look for related material yourself. This will develop your ability to decide for yourself whether a paper or article or textbook is of value, and will give you useful skills for carrying out your project and in your future career.

The examination will consist of questions from the material introduced in this study guide, as well as the broader reading and courseworks. A sample examination paper is included to give you an idea of the kind of questions to expect.

This is a fast-moving area and an exciting one. We hope you find the subject interesting and stimulating!

Syllabus

This subject guide presents material on topics within the subject of sound and music in a creative computing context. These are:

- computational models of music cognition
- interactive sound using Pure Data
- algorithmic composition
- understanding musical interaction
- music retrieval and searching.

You also are expected to complete two courseworks that contain relevant material from the syllabus. Some of the material for the courseworks may be covered in the study guide; for some of it you are also expected to read and research independently.

The courseworks are an integral part of your learning experience in this subject.

Reading

There is no one prescribed text for this course. Sometimes specific readings are suggested in relevant sections of the subject guide; sometimes mention is made of books and papers that explain concepts more. The bibliography at the end of this volume is a useful resource for you. You are not expected to know all of the references it lists in great detail, but it provides you with an overview of the area, as well as the ability to examine in more depth any topic that is of particular interest.

A guided reading list accompanies this guide, to help you synthesise the material from an exciting and fast-growing area.

Finally ...

We hope that topics covered in the subject guide, together with the courseworks, will whet your appetite for further investigation into the use of computers in music, which is a broad and stimulating area. Best wishes for your studies!

Sarah Rauchas and Jamie Forth, Goldsmiths, University of London