1. **Title of the module**

CMAT5010 Advanced Audio Techniques

1. **School or partner institution which will be responsible for management of the module**

Centre for Music and Audio Technology (CMAT)

1. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**

Level 5

1. **The number of credits and the ECTS value which the module represents**

15 credits (7.5 ECTS)

1. **Which term(s) the module is to be taught in (or other teaching pattern)**

Term 1

1. **Prerequisite and co-requisite modules**

None

1. **The programmes of study to which the module contributes**

BSc (Hons) Music Technology and Production

1. **The intended subject specific learning outcomes.
On successfully completing the module students will be able to:**
2. demonstrate a critical understanding of analogue-digital processes, artefacts and errors, data storage systems and compression formats;
3. apply concepts and principles associated with digital signal processing and evaluate their appropriateness in audio production contexts;
4. deploy sophisticated skills in recording a diverse range of sources in the studio environment using a variety of techniques;
5. integrate creative and technical decision-making in carrying out sophisticated production processes.
6. **The intended generic learning outcomes.
On successfully completing the module students will be able to:**
7. communicate ideas, arguments and concepts and interact effectively with others;
8. generate, analyse and interpret appropriate data, while understanding the limits of their knowledge and how that influences their interpretation;
9. demonstrate core skills such as problem solving, evaluating critically and decoding information;
10. demonstrate effective approaches to time management, including the ability to plan and to set priorities and to manage resources effectively.
11. **A synopsis of the curriculum**

In this module, students will develop an understanding of a broad range of topics concerning recording and post-production processes in the studio environment.  Topics covered will include digital formats, sampling, filter design and compression. Concepts of data manipulation will be studied in order to perform audio signal processing such as delay, chorus, reverberation and equalisation. The module will also cover stereo and spaced microphone techniques.

1. **Reading list (Indicative list, current at time of publication. Reading lists will be published annually)**

Bartlett B, Bartlett J. (2012) *Practical Recording Techniques.* 6th ed.Focal Press.

Corey, J. (2010). *Audio Production and Critical Listening: Technical Ear Training*. Oxford: Focal.

Eargle J. (2011) *The Microphone Book.* Oxford: Focal Press.

Huber, D.M. and Runstein, R.E. (2017). *Modern Recording Techniques*. 9th ed. Oxon: Routledge.

Owsinski B. (2014) *The Mixing Engineer's Handbook (Mix Pro Audio Series)*. 3rd ed. Boston: Cengage Learning

Zager, M. (2012). *Music Production: For Producers, Composers, Arrangers, and Students*. 2nd ed. Lanham, Md: Scarecrow Press.

1. **Learning and teaching methods**

This module will be taught by means of lectures, workshops and a feedback tutorial.

Total Contact Hours: 22

Independent Study Hours: 128

Total Study Hours: 150

1. **Assessment methods**
	1. Main assessment methods

100% coursework:

* Essay (1800 Words) 60%
* Audio Project 40%: Consists of Multitrack Studio Recording (3 minutes; 30%) and Explanatory Note (300 words; 10%).
	1. Reassessment methods
* Like for like.
1. **Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section12) and methods of assessment (section 13)**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Module learning outcome** | *8.1* | *8.2* | *8.3* | *8.4* | *9.1* | *9.2* | *9.3* | *9.4* |
| **Learning/ teaching method** |  |  |  |  |  |  |  |  |
| Private Study | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** |
| Lecture | **x** | **x** | **x** | **x** |  | **x** |  |  |
| Workshop | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** |
| Feedback tutorial | **x** | **x** |  | **x** | **x** |  | **x** |  |
| **Assessment method** |  |  |  |  |  |  |  |  |
| Essay | **x** | **x** |  |  | **x** | **x** | **x** | **x** |
| Multitrack Studio Recording | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Explanatory Note |  | **x** |  | **x** | **x** | **x** | **x** |  |

1. **Inclusive module design**

The Centre recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

1. **Campus(es) or centre(s) where module will be delivered**

Medway, CMAT

1. **Internationalisation**

Audio technology covers international industries, and uses a few standard software and hardware tools. Some of these standard tools will feature in the module, allowing students to gain experience which can be internationally recognised. This technical knowledge and understanding of widely used equipment and software will help students to be find employment both at home and abroad.

**FACULTIES SUPPORT OFFICE USE ONLY**

**Revision record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date approved | Major/minor revision | Start date of the delivery of revised version | Section revised | Impacts PLOs (Q6&7 cover sheet) |
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