

6.14 Module 14: Live Music & Performance Technology 2

Module Title	Live Music and Performance Technology 2
Module NFQ Level (only if an NFQ level can be demonstrated)	7
BAAMT201	BAAMT205
Parent Programme	BA (Hons) in Audio and Music Technology
Stage of Parent Programme	2
Semester	2
Module Credit Units (FET/HET/ECTS)	ECTS
Module Credit number of Units	5
List the teaching and learning modes	FT
Entry requirements (statement of knowledge, skill and competence)	Learner has earned Level 5 qualification. No previous experience is required
Pre-requisite module titles	None
Co-requisite module titles	None
Is this a capstone module? (Yes or No)	No
Staff qualifications (academic, pedagogical and professional/occupational) and experience required. (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)	Staff are required to have at least a Bachelor of Arts (Honours) qualification in Music Technology or related discipline. Industry experience would be a benefit but is not a requirement. Staff are expected to have the Certificate in Training and Education qualification from Griffith College or its equivalent.
Staff/learner ratio per centre (or instance of the module)	For lecture load, ratio of 1:50 lecturer to learner is required and in lab sessions the maximum allowed is 1:25 The lecturer will also have 1 hour per week set aside in their timetable for 1:1 contact with learners who require it or have particular items they want to discuss.
Maximum number of learners per centre (or instance of the module)	50
Duration of the Module	One Academic Semester, 12 weeks teaching
Average (over the duration of the module) of the contact hours per week.	3
Physical resources and support required per centre (or instance of the module)	One lecture hall with capacity at least 50 and one computer lab with capacity of 25.

Analysis of Required Learning Effort										
Effort while in contact with staff										
Classroom and Demonstrations		Mentoring and small group tutoring		Other (Specify)		Directed e-learning (hours)	Independent learning (hours)	Other hours (specify)	Work-based learning hours of learning effort	Total Effort (hours)
Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner	Hours	Minimum ratio teacher/learner					
24	1:50	12	1:25				89			125
Allocation of marks (within the module)										
						Continuous Assessment	Supervised Project(s)	Proctored practical	Proctored Written Examination	Total
Percentage contribution							50%	50%		100%

6.14.1 Module Aims and Objectives

This module follows from Live Performance Technologies 1. Learners gain insight into a variety of standard workflows surrounding live performances. As well as audio and visual technologies, learners are taught the basics of instrument technology.

Drum, keyboard and guitar technicians will teach learners the correct planning, preparation and setup of instruments for the stage. DJ and VJ technologies will also be introduced at this stage.

6.14.2 Minimum Intended Module Learning Outcomes

On successful completion of this module the learner will be able to:

- MLO 14.1 Demonstrate a knowledge of DJ & VJ technologies.
- MLO 14.2 Setup the backline for live music and performance.
- MLO 14.3 Work as a key member of production team in diverse contexts including concert performance, interactive installation and theatre.
- MLO 14.4 Examine lighting technologies and synchronization.
- MLO 14.5 Use visual performance technologies effectively for live performance.

6.14.3 Rationale for inclusion of the module in the programme and its contribution to the overall IPLOs

Emerging technologies are more accessible and portable. Knowing how to work with these technologies is a big advantage for any professional looking to succeed, whether it's in the studio, or in the world of live performance. Digital control by the performer of more than just a single instrument is commonplace, particularly in the world of EDM. Using controllers to trigger sound and also bespoke visuals can now be done live on stage allowing for a more interactive audio visual experience. The learning outcomes in this module contribute to the learner's attainment of Programme Learning Outcome 1, 7 and 8.

6.14.4 Information Provided to Learners about the Module

Learners enrolled on this module will receive a copy of the module descriptor and assignment briefs, including an outline of the criteria for assessment.

Previous examples of assignments are also presented to the class.

6.14.5 Module Content, Organisation and Structure

The module is organised to deliver theory through lectures (2 hours) and supervised tutorials (1 hours). During tutorials, each learner will have a workstation allowing the lecturer to work individually with learners to demonstrate and explain the material. Some tutorials will take place in a larger room with P.A. and lighting equipment allowing learners to engage directly in a performance scenario.

The lectures each week will combine lecture delivery and discussion on the material.

Each lecturer has a time allocated for one-to-one meetings with learners as required. These are not mandatory sessions but available either where the lecturer wishes to discuss an element of the module with a learner, or a learner requests a meeting to discuss a particular topic. These sessions focus on academic issues only.

Module Content

Visual performance technologies

- Competent use of audio-visual performance software.

Lighting technologies and synchronization

- The mechanics of stage lighting and the principles of lighting design.

Working as a key member of a production team

- Knowledge of the roles and workflows of modern concert and theatre productions.
- Working in diverse contexts including concert performance, interactive installation and theatre.

Backline setup

- Timely and effective set –up of components of backline; drums, guitars or keyboard rigs.

DJ & VJ technologies

- Competence in the use of DJ & VJ software and controllers.

6.14.6 Module Teaching and Learning Strategy

This module is delivered using a combination of lectures, tutorials and practical sessions in a performance environment. The emphasis is on developing performance skills between music technology software and hardware during a live show. These skills need to be applied in a systematic way, so learners will be encouraged to work in a performance setting as often as possible.

Activity	Teaching / Learning Strategy	Learning Environment
Lecture (24 hours)	Lectures / participative discussions / case studies of live sound environments and set ups	College
Tutorial (12 hours)	Practicing set up and operation of live sound equipment / training in various live sound set ups and situations / use of live performance equipment / use of synchronization and controller systems	College / Studio
Assignment (48 hours)	Practice learning and perfecting live music and performance technology skills	College
Independent Work (41 hours)	Directed and self-directed learning / home study	College / Home

6.14.7 Timetabling, Learner Effort and Credit

The module is timetabled as one 3-hour session to the whole class. This will consist of the 2-hour lecture, and a 1-hour tutorial. In the labs, the learners engage directly with music technology and performance software and controllers, allowing development of the skills required to programme audio/visual material.

The number of credits assigned to this module is our assessment of the amount of learner effort required. It is our view that 5 ECTS of learner effort is required by learners coming new to the material to achieve the learning outcomes required.

6.14.8 Work-based Learning and Practice-placement.

There is no work based learning or practical placement involved in the module.

6.14.9 E-Learning

The College VLE is used to disseminate notes, advice and online resources to support the learners. The learners are also given access to Lynda.com as a resource for reference.

6.14.10 Module Physical Resource Requirements

Requirements are for a fully equipped lecture hall and access for learners to 3 hour sessions in a computer lab. Software required for this module is music tech software and performance controller. A standard DAW and visual programming software. Performance controllers will be required with a performance area for tutorials and student independent learning.

6.14.11 Reading lists and other Information Resources.

Recommended Reading

Butler, M.J. (2014) *Playing with something that runs technology, improvisation, and composition in DJ and laptop performance*. Oxford: OUP.

Hopgood, J. (2013) *QLab 3 Show Control: projects for live performances & installations*. Oxford: Focal Press.

Schiller, B. (2016) *The Automated Lighting Programmer's Handbook* Focal Press

Keller, M. & Weiss, J. (2010) *Light fantastic: the art and design of stage lighting*. New York: Prestel.

Amundson, M. (2007) *Live sound: theory and practice*, Las Vegas: Timeless Communications.

Huntington, J. (2013) *Control systems for live entertainment*, Oxford: Focal Press.

Margulies, J. (2013) *Ableton Live 9 power*. Delmar Cengage

Van Beek, M. (2004) *Electrical safety for live events*. Cambridge: Entertainment Technology Press.

Secondary Reading

Jenkins, Mark. (2012). *iPad Music: In the studio and on stage*, Focal Press.

Song, J. (Ed.) (2013) *Stage Design: Concerts, Events, Ceremonies and Theater*. Gingko Press

Higgs, C. (2002) *An Introduction to Rigging in the Entertainment Industry*, Entertainment Technology Press Ltd

Scott Giaquinta, J. (2015) *Djing with Ableton Live* Lynda.com

Minsteris, D. (2014) *Performing with Ableton Live: On Stage with St. Vincent*. Lynda.com

Childs, G.W. (2009) *Reason and Record for Live Performance* Lynda.com

6.14.12 Specifications for Module Staffing Requirements

For each instance of the module, there will be one lecturer qualified to at least Bachelor of Arts (Honours) level in Music Technology or equivalent and with a relevant third level teaching qualification (e.g. Certificate in Training and Education). Depending on numbers a lab assistant may be required. Where this is the case the Assistant will be required to have a sound understanding of object oriented programming, either through industry experience or academic qualification. For example, a final year Bachelor of Music Production (Honours) learner may be suitable to assist the lecturer in lab sessions. Any lab assistant will work under the supervision of the lecturer and to agreed worksheets.

6.14.13 Module Summative Assessment Strategy

The assessment is based on practical demonstrations and group performance

Element No	Weighting	Type	Description	Learning Outcomes Assessed
1	20%	Assignment	Learners are required to create a lighting plan/performance to accompany a piece of music. The plan will be executed as an in-class performance, requiring learners to setup and connect software and hardware for the performance.	13.1 – 13.3
2	30%	Assignment	Learners are required to create a bespoke visual plan/performance to accompany a piece of music. The plan will be performed in class, requiring learners to setup and connect software and hardware for the performance.	13.1, 13.3, 13.5
3	50%	Group Practical	In groups, learners will plan and realise a musical performance with accompanying lighting and visuals. This will be performed as an in-class assessment. The musical element will contain both DJ performance and live performance control of musical instrument software.	13.1 – 13.5

6.14.14 Sample Assessment Materials

Sample Assignment 1:

For this assignment, you are required develop a bespoke lighting plan and stage setup for a piece of music. The music must be negotiated with your tutor.

The music can be no longer than 4 minutes in duration. You will then perform/execute the piece as an in-class assessment. The lighting plan should reflect the tone/mood of the music. You may use either hardware or software controllers for the performance.

You are not limited to just college equipment; you may bring in other lights/props for the performance.

Once complete, you will submit a technical log (Microsoft Word Document) documenting the working processes employed, a critical reflection on the processes and an evaluation and critique of the completed work.

Sample Assignment 2:

For this assignment, you are required develop a bespoke visual accompaniment to a piece of music. The music must be negotiated with your tutor. You may use programming software (e.g. Q-Lab) to create/programme the visuals. The visual element should contain at least one element of each of the following:

- Still photo
- Live action video
- Abstract visuals

The music can be no longer than 4 minutes in duration. You will then perform/execute the piece as an in-class assessment. The visuals should reflect the tone/mood of the music. You may use either hardware or software controllers for the performance.

You are not limited to just college equipment; you may bring in other lights/props for the performance.

Once complete, you will submit a technical log (Microsoft Word Document) documenting the working processes employed, a critical reflection on the processes and an evaluation and critique of the completed work

Sample Assignment 3: Group Performance.

In groups, assigned by your tutor, you will plan and realise a live musical performance and accompanying lighting and visuals.

The music may be an original piece or a performance of a cover song. While recorded music is allowed, there must be at least one of each of the following:

- Live DJ (hardware or software)
- Live triggered sound – at least 3 elements (e.g. drums/pads/voice)
- Live bespoke visuals
- Live bespoke lighting.

You are not limited to just college equipment; you may bring in other lights/props for the performance.

Once complete, you will submit a technical log (Microsoft Word Document) documenting the working processes employed, a critical reflection on the processes and an evaluation and critique of the completed work.