Higher Music Technology

Assignment

Assessment task

This document provides information for teachers and lecturers about the coursework component of this course in terms of the skills, knowledge and understanding that are assessed.

Valid from session 2023-24 and until further notice.

Contents

Introduction

This document contains instructions for teachers and lecturers and instructions for candidates for the Higher Music Technology assignment. You must read it in conjunction with the course specification.

This assignment is worth 80 marks. This is 70% of the overall marks for the course assessment.

This is one of two course assessment components. The other component is a question paper.

The purpose of the assignment is to assess practical application of knowledge and skills from the course to plan, implement and evaluate a creative production using music technology.

The assignment has three stages.

Stage 1 'planning the production' has 20 marks.
Stage 2 'implementing the production' has 50 marks.
Stage 3 'evaluating the production' has 10 marks.

Teachers or lecturers should provide candidates with the instructions for candidates in this document.

Instructions for teachers and lecturers

Task requirements

The creative production may be in any appropriate context such as (but not limited to) radio broadcast, composing and sound design for film, audiobooks and computer gaming, and must include both:

♦ multi-tracked recording(s) of sounds and/or music, and

♦ multi-tracked, electronically produced sounds and/or music

These multi-tracks must be combined into a complete production appropriate to the chosen context.

The production must be at least 4 minutes, but no more than 7 minutes, in length and must involve at least 10 tracks.

Candidates must agree their chosen context and production with you, to ensure that it is appropriately challenging and allows them to demonstrate all of the required technical skills listed below:

Audio capture skills
♦ selecting and making appropriate use of at least two types of microphone and two polar patterns, with placement appropriate to the sound source, and using at least one stereo recording technique
♦ selecting and making appropriate use of at least one source which requires a direct line input
♦ selecting and using virtual and/or MIDI instruments to create electronic sounds and/or music
♦ successfully designing and safely constructing the signal path for multiple inputs
♦ setting appropriate input gain and monitoring levels, with no distortion
♦ overdubbing at least one track

Processing skills
♦ editing tracks, including editing a minimum of three takes into a single take
♦ applying creative and/or corrective equalisation
♦ applying dynamics processing, including the use of compression and/or limiting, and noise gate controllers

Applying effects
♦ applying time domain and other effects, including at least two from: delay, echo, reverb, chorus, phase, flange
♦ manipulating the controls of virtual and/or MIDI instruments (for example ADSR envelopes, LFO, filter)

Mixing and sequencing skills

♦ applying a range of mixing techniques, including using volume, panning, automation, send and insert effects, and grouping/bussing to achieve a balanced and creative mix

♦ accurate synchronisation and/or sequencing in complex scenarios involving multiple takes and/or simultaneous events

♦ mixing down to an audio master in appropriate file format(s)

Marking instructions

In line with SQA's normal practice, the following marking instructions for the Higher Music Technology assignment are addressed to the marker. They will also be helpful for those preparing candidates for course assessment.

Candidates' evidence is submitted to SQA for external marking.

General marking principles

Always apply these general principles. Use them in conjunction with the detailed marking instructions, which identify the key features required in candidates' responses.

a   Always use positive marking. This means candidates accumulate marks for the demonstration of relevant skills, knowledge and understanding; marks are not deducted for errors or omissions.

b   Award marks for planning based on the formal plans provided as evidence. If no plans are provided, award 0 marks for planning.

c   Award marks for implementing based on the completed audio master and the record of progress:

— If no audio master is provided, award 0 marks for implementing.

— If no record of progress is provided, award appropriate marks from the lower bands.

d   Award marks for evaluating based on the evaluation report provided as evidence, which must relate to the audio master provided. If no audio master is provided, award 0 marks for evaluating.

e   For each of the stages, select the band descriptor which most closely describes the evidence presented. Once the best fit has been selected:

— where the evidence almost matches the level above, award the higher mark from the range

— where the evidence just meets the standard described, award the lower mark from the range

— where the evidence completely matches the highest level band descriptor for any stage, award full marks for that stage

Detailed marking instructions

Criteria for stage 1a: planning sound design	Mark range
Fully informative, detailed and complete evidence of planning	9-10
Informative and complete evidence of planning	7-8
Evidence of planning which is mostly complete and appropriate, but lacking in detail in some areas	5-6
Incomplete evidence of planning	3-4
Little evidence of planning	1-2
No evidence of planning	0

For stage 1a, the candidate must provide evidence of:

♦ a detailed sound design map containing each element of the soundtrack (for example sound design, Foley, dialogue, music)

♦ a detailed production plan itemising each piece of sound design, Foley or dialogue, including planning of microphone type and position, EQ, effects, processing and automation

♦ an outline of the music required

Criteria for stage 1b: planning the recording, creating, editing and mixing	Mark range
Fully informative, detailed and complete evidence of planning	9-10
Informative and complete evidence of planning	7-8
Evidence of planning which is mostly complete and appropriate, but lacking in detail in some areas	5-6
Incomplete evidence of planning	3-4
Little evidence of planning	1-2
No evidence of planning	0

For stage 1b, the candidate must provide evidence of:

♦ a detailed performance plan for the musical elements of the production

♦ a production plan which describes how each sound element will be recorded and/or created, including microphone types, pattern and placements and the reasons for choices

♦ a mixing plan, including intended use of effects, processes and automation, and the reasons for choices

Criteria for stage 2a: implementing the production — audio capture	Mark range
Completed to a high standard, demonstrating a comprehensive knowledge of audio capture techniques, fully documented in progress record	9–10
Completed to a reasonable standard, demonstrating a good knowledge of audio capture techniques, and documented in progress record	7–8
Completed to a minimally acceptable standard, demonstrating some knowledge of audio capture techniques, partially documented in progress record	5-6
Completed to a minimally acceptable standard, but with little evidence in progress record	3-4
Incomplete	1–2
No evidence of audio capture	0

For stage 2a, the candidate must provide evidence of:

♦ selecting and making appropriate use of at least two types of microphone and two polar patterns, with placement appropriate to the sound source, and using at least one stereo recording technique
♦ selecting and making appropriate use of at least one source which requires a direct line input
♦ choosing and setting appropriate input gain and monitoring levels, with no distortion
♦ selecting and using virtual and/or MIDI instruments to create electronic sound and/or music
♦ successfully designing and safely constructing the signal path for multiple inputs
♦ overdubbing at least one track

Criteria for stage 2b: implementing the production — processing skills	Mark range
Completed to a high standard, demonstrating a comprehensive knowledge of processing skills and technical awareness, fully documented in progress record	9–10
Completed to a reasonable standard, demonstrating a good knowledge of processing skills and technical awareness, and documented in progress record	7–8
Completed to a minimally acceptable standard, demonstrating some knowledge of processing skills and technical awareness, partially documented in progress record	5-6
Completed to a minimally acceptable standard, but with little evidence in progress record	3-4
Incomplete	1-2
No evidence of processing skills	0

For stage 2b, the candidate must provide evidence of:

♦ applying creative and/or corrective equalisation

♦ applying dynamics processing, including the use of compression and/or limiting and noise gate

♦ editing tracks, including editing a minimum of three takes into a single take

Criteria for stage 2c: implementing the production — applying effects	Mark range
Completed to a high standard, demonstrating a comprehensive knowledge of effects, fully documented in progress record	9–10
Completed to a reasonable standard, demonstrating a good knowledge of effects, and documented in progress record	7–8
Completed to a minimally acceptable standard, demonstrating some knowledge of effects, partially documented in progress record	5-6
Completed to a minimally acceptable standard, but with little evidence in progress record	3-4
Incomplete	1-2
No evidence of applying effects	0

For stage 2c, the candidate must provide evidence of:

♦ applying time domain and other effects, including at least two from: delay, echo, reverb, chorus, phase, flange

♦ manipulating the controls of virtual and/or MIDI instruments (for example ADSR envelopes, LFO, filter)

Criteria for stage 2d: implementing the production — mixing and sequencing skills	Mark range
Completed to a high standard, demonstrating a comprehensive knowledge of mixing and sequencing skills and technical awareness, fully documented in progress record	9–10
Completed to a reasonable standard, demonstrating a good knowledge of mixing and sequencing skills and technical awareness, and documented in progress record	7–8
Completed to a minimally acceptable standard, demonstrating some knowledge of mixing and sequencing skills and technical awareness, partially documented in progress record	5-6
Completed to a minimally acceptable standard, but with little evidence in progress record	3-4
Incomplete	1-2
No evidence of mixing and sequencing skills	0

For stage 2d, the candidate must provide evidence of:

♦ applying a range of mixing techniques, including using volume, panning, automation, send and insert effects and grouping/bussing to achieve a balanced and creative mix

♦ accurate synchronisation and/or sequencing in complex scenarios involving multiple takes and/or simultaneous events

♦ mixing down to an audio master in appropriate file format(s)

Criteria for stage 2e: implementing the production — creative and appropriate use of sound and/or music	Mark range
Implementation includes significant creative use of appropriate sounds and/or music, and fully documented in progress record	9–10
Implementation includes some creative use of appropriate sounds and/or music, and well documented in progress record	7–8
Implementation includes some creative use of appropriate sounds and/or music, and partially documented in progress record	5-6
Implementation includes minimal creative use of appropriate sounds and/or music, and with little evidence in progress record	3-4
Implementation shows little evidence of appropriate choices of sound and/or music, or with no evidence in progress record	1-2
No evidence of creative and appropriate use of appropriate sounds and/or music	0

Criteria for stage 3: evaluating the production	Mark range
Evaluation report is consistent, detailed and relevant, and with clear, valid evaluation against clearly stated criteria	9–10
Evaluation report is consistent and relevant, and with clear, reasoned evaluation	7–8
Evaluation report is consistent and relevant, with some evaluative comments	5–6
Evaluation report is complete, but lacking in evaluative comments	3–4
Evaluation report is incomplete, unclear or inconsistent	1–2
No evidence of evaluation	0

For stage 3, the candidate report must include evaluation of their:

♦ planning
♦ recording and creating
♦ editing and processing
♦ final mix, including:
  — justification for significant technical and creative decisions
  — suggestions for improvements, and information about how these suggestions could be achieved, in both the development and production processes

Instructions for candidates

This assessment applies to the assignment for Higher Music Technology.

This assignment is worth 80 marks. This is 70% of the overall marks for the course assessment.

It assesses the following skills, knowledge and understanding:

♦ skills in using music technology hardware and software to capture and manipulate audio
♦ application of music technology in creative ways
♦ planning, implementing and evaluating a sound production

This assignment has three stages.

Stage 1 'planning the production' has 20 marks.
Stage 2 'implementing the production' has 50 marks.
Stage 3 'evaluating the production' has 10 marks.

Your teacher or lecturer will let you know if there are any specific conditions for doing this assessment.

In this assessment, you have to produce the audio for a film soundtrack, audiobook, radio broadcast, computer game or other similar context.

Your production must include both:

♦ multi-tracked recording(s) of sounds and/or music and
♦ multi-tracked, electronically produced sounds and/or music

These multi-tracks must be combined into a complete production appropriate to your chosen context.

Your production must be at least 4 minutes, but no more than 7 minutes, in length, and must involve at least 10 tracks.

Throughout the task, you must keep a record of progress. This could be an informal log or diary in handwritten or electronic form.

You should update your record of progress after each stage of the task. It should explain what you have done, describe any help you needed, and list any evidence you have produced (printouts, sketches, photographs, sound files).

After each stage of the task, ask your teacher or lecturer to check your work.

Before you begin

You should discuss the task with your teacher or lecturer before you begin the planning process to ensure that your production will allow you to demonstrate all of the following technical skills:

Audio capture
♦ selecting and making appropriate use of at least two types of microphone and two polar patterns, with placement appropriate to the sound source, and using at least one stereo recording technique
♦ selecting and making appropriate use of at least one source which requires a direct line input
♦ selecting and using virtual and/or MIDI instruments to create electronic sounds and/or music
♦ successfully designing and safely constructing the signal path for multiple inputs
♦ setting appropriate input gain and monitoring levels, with no distortion
♦ overdubbing at least one track

Processing
♦ editing tracks, including editing a minimum of three takes into a single take
♦ applying creative and/or corrective equalisation
♦ applying dynamics processing, including the use of compression and/or limiting and noise gate controllers

Applying effects
♦ applying time domain and other effects, including at least two from: delay, echo, reverb, chorus, phase, flange
♦ manipulating the controls of virtual and/or MIDI instruments (for example ADSR envelopes, LFO, filter)

Mixing and sequencing
♦ applying a range of mixing techniques, including using volume, panning, automation, send and insert effects, and grouping/bussing to achieve a balanced and creative mix
♦ accurate synchronisation and/or sequencing in complex scenarios involving multiple takes and/or simultaneous events
♦ mixing down to an audio master in appropriate file format(s)

If you are sure that your production will allow you to demonstrate all of the above technical skills, and have confirmed this with your teacher or lecturer, you are ready to begin planning your production.

Stage 1: planning the production (20 marks)

During the planning stage, you must produce the following:

Planning sound design (10 marks)

♦ a detailed sound design map containing each element of the audio (for example sound design, Foley, dialogue, music)

♦ a detailed production plan, itemising each piece of sound design, Foley or dialogue, including planning of microphone type and position, EQ, effects, processing and automation

♦ an outline of the music you are going to use

♦ an updated record of progress, documenting the planning process for this stage

Planning the recording, creating, editing, and mixing (10 marks)

♦ a detailed performance plan for the musical elements of the production, which may be influenced by decisions you made above

♦ a production plan, which should describe how you will record and/or create each sound element, including microphone types, pattern and placements, and virtual and/or MIDI instruments, and the reasons for your choices

♦ a mixing plan, including how you intend to use effects, processes and automation, and the reasons for your choices

♦ an updated record of progress, documenting the planning process for this stage

Stage 2: implementing the production (50 marks)

During this stage, you must produce the following:

♦ a completed soundtrack, including the multi-tracked recordings, bounced to an appropriate audio format (or video file format, with embedded audio)

♦ an updated record of progress, documenting the techniques used in the development of the multi-tracked recordings, and details of the development of the complete soundtrack

Stage 3: evaluating the production (10 marks)

Your evaluation must include your:

♦ justification for significant technical and creative decisions

♦ suggestions of how and where you could make improvements

♦ evaluation of the development process and the production process

You must evaluate your:

♦ planning

♦ recording and creating

♦ editing and processing

♦ final mix

Final checks

Check your work to make sure you have completed all stages of the assignment. Check that you have collected all the required evidence.

Let your teacher or lecturer know when you have finished the assignment.

Administrative information

Published: August 2023 (version 2.0)

History of changes

Version	Description of change	Date
1.1	'Valid for session' dates on front page updated. No other changes.	August 2022
2.0	Document updated to reinstate requirements previously removed due to modifications to course assessment in sessions 2021–22 and 2022–23.	August 2023

Note: you are advised to check SQA's website to ensure you are using the most up-to-date version of this document.

Security and confidentiality

This document can be used by SQA approved centres for the assessment of National Courses and not for any other purpose.