

Liverpool John Moores University

Title: Audio Restoration Theory and Practice
Status: Definitive
Code: **7001AMP** (127227)
Version Start Date: 01-08-2021

Owning School/Faculty: Engineering
Teaching School/Faculty: Engineering

Team	Leader
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Academic Level: FHEQ7
Credit Value: 30
Total Delivered Hours: 55
Total Learning Hours: 300
Private Study: 245

Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	22
Practical	33

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	Test	Equipment and Format Identification	25	
Technology	Remasterin	Restoration and Remastering of various formats (equivalent to 3000 words)	50	
Practice	Optimisati	Reference equipment optimisation (equivalent to 2000 words)	25	

Aims

To provide students with a comprehensive understanding of the theory, processes

and techniques in the field of Audio Restoration

To equip the student with knowledge and understanding to critically analyse, select and apply appropriate techniques to transcode, restore, deliver and report upon the methodologies engaged in the recovery of audio media

Learning Outcomes

After completing the module the student should be able to:

- 1 Critically appraise the formats and processes for professional standard audio restoration projects
- 2 Analyse, research and apply appropriate informed methods to set up and benchmark an Audio Restoration suite
- 3 Deliver restored materials in a variety of appropriate professional standards and report in depth, showing a thorough understanding of the risks, implications and influence of the procedures completed.

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Test	1		
Remastering	1	2	3
Optimisation	1	2	

Outline Syllabus

Introduction to Audio Restoration

Benchmarking and Reference Equipment setup

The Syllabus involves applying The Restoration Process chain appropriately for various Legacy formats. These are:

- 1. Capture from original format*
- 2. Transfer to digital format*
- 3. Manipulation in Restoration Software*
- 4. Quality Assessment and Documentation for effectiveness and acceptability of the restoration processes*
- 5. Storage options for completed restoration (File formats etc.)*
- 6. Distribution and Streaming options of finished materials*

Formats studied will include:

Mechanical (Cylinder and Disc)

Electrically Recorded Analogue formats (Disc)

Electrically recorded optical formats (Sound on Film)

Analogue Magnetic Tape formats (Reel to Reel, Cassette, 8 Track, VHS, Betamax)

Digital Tape Formats (DAT)

Optical Digital Formats (CD DVD Blu-ray Mini Disc)

Solid State digital formats (Mobile media recordings e.g. phone, dashcam)

Learning Activities

Lectures, Practical sessions and demonstrations including measurement and calculation procedures

Notes

This module will provide students with a thorough understanding of the relevant skills, processes and procedures pertinent to their potential role as an Audio Restoration Specialist. The focus will be on many common audio legacy formats although there may be scope to specialise in specific areas of the industry.