

NORTHUMBRIA UNIVERSITY

MODULE DESCRIPTOR

CM533 - *Multimedia Timebased Assets* For Academic Year 2005

Module Titles

Actual: Multimedia Timebased Assets

Administrative: MultimediaTimebased Assets

Module Information

It is of Level 5 ,Size 2 and is worth 20 Credit Points.

This Module is a Year Long Taught Module and was not evolved.

It is not currently obsolete.

Module Ownership

The Module Tutor is Dave Kemp

In the Division of Computing

In the School of Informatics

Module External Information

The Cost Centre is Information Technology and Systems Sciences
and the price group is C

The HESA Subject is Computer Science

Synopsis of Module:

A brief overview of aims, contents, methods and assessment

This module aims to extend students' practical skills in current technologies and tools for generating and manipulating time-based media in a multimedia context. This will be supported by an understanding of theoretical, critical, and contextual issues related to the use of time-based media as communicative tools, as a devices for experimental or virtual interfaces, and as elements of accessible and safety-critical systems.

This module will develop students' practical skills in multimedia authoring using industry standard tools, via a series of practical workshops, directed exercises and exemplar material. It will address theoretical issues via lectures, which will include discursive sessions. It is intended to support the formal, assessed teaching on this unit with the addition of input from outside speakers in relevant industries, to give students an insight into the current state of multimedia computing in the commercial world.

Assessment will be by a project to demonstrate students' practical skills and their ability to apply them to an appropriate and well-investigated context. The project will also contain a reflective report to explore the cross-modal issues of the practical work in the light of current thinking and recent research.

Prerequisite(s):

Any Module which must already have been taken at a lower level, or any stipulated level of prior knowledge required.

Multimedia Asset Development and Design

Corequisite(s):

Module at the same level which must taken with this Module.

None

Implications for Choice:

Possible follow-on Modules, or exclusions, or Modules which require this one as a prerequisite.

None

Aims of Module:

Specified in terms of general aim of the teaching in its relation to the subject.

1. To develop students' abilities to originate, synchronise, and integrate time-based materials for use within a multimedia computer environment.
2. To provide students with an understanding of cross-media issues.
3. To provide students with a critical understanding of design techniques and technological issues relating to time-based assets.
4. To give students an appreciation of the potential of time-based assets as communicative and accessibility tools.

Learning Outcomes:

Specified in terms of performance capability to be shown on completion of the Module.

1. Originate time-based assets using computer-based and computer-assisted technologies.
2. Integrate and synchronise time-based assets within a computer-controlled multimedia setting.
3. Make informed and effective use of time-based assets as a means of communication in a specific context.
4. Define and discuss cross-media issues and issues relating to the design and implementation of time-based assets.
5. Justify his/her design and technology decisions in the context of above issues and of issues of communication, accessibility, ethics, and professionalism.

Outline Syllabus:

The content of the Module, identified in a component listing.

Sound as a communication medium (30%)

- sound language, ambient and atmospheric sound
- psycho-acoustics and how to use sounds
- sound navigation, auditory displays, and aural interfaces

MIDI - • Musical Instrument Digital Interface (15%)

- what is it and how it works, protocols
- inputting and outputting MIDI
- MIDI sequencing
- combining MIDI and audio (e.g. WAV) files
- practical usage and contexts

Video (30%)

- digital Vs analogue (in theory and practice)
- filming - video language, managing shooting
- digitising, optimising, compression systems for DVD, Web, CD, & Tape
- synchronising sound to video

Cross-modal issues (25%)

- cross-modal interaction effects, discontinuity, complementarity
- accessibility issues
- time-based control structures and environments, including simple virtual environments
- current developments in time-based multimedia assets and computer-controlled time-based applications
- integrating and synchronising time-based assets

Learning, Teaching And Assessment Strategy:

Teaching will involve Lectures and discussion covering theoretical aspects. It is intended to augment the formal, assessed content with input from outside speakers. Practical work will be covered in workshop sessions.

The assessment will include a practical project testing learning outcomes 1, 2 & 3 and a written report testing learning outcomes 4 & 5, with some reflection on learning outcomes 1,2, & 3.

Distance Learning Delivery:

None

Indicative Reading List or Other Learning Resources:

(Note: all references to be given as per Harvard System)

Alesso, Peter H. (2000) e-Video: producing Internet video as Broadband

Technologies, Addison Wesley

Crowcroft, J (1999) Internetworking Multimedia, Morgan Kaufmann

Hart, J (1999) The Art of Storyboard, Focal Press

Katz, S.D. (1991) Film Directing Shot by Shot, Michael Wiese Productions

Kramer, G (Ed.) (1994) Auditory Display, Addison-Wesley, Reading MA.

Pohlman, K (2000) Principles of Digital Audio, McGraw-Hill

Tekalp (latest ed.) Digital Video Processing, Prentice Hall

Walkinson, J (200) The Art of Digital Video, Focal.

Journals & Conferences

- Relevant and recent journal articles & conference papers will be accessible via the module's Blackboard presence.

Web resources

- The module's Blackboard presence contains links to useful complimentary web sites.

Module Delivery Details - Notional Student Workload (Hours)

Mode and Location	Lectures	Seminars	Tutorials	Lab Work	Directed Learning	Independent Learning	Formal Assessment	Other	Total
Full Time at City Campus (The duration is 30 weeks)	24	0	0	24	52	60	40	0	200
Full Time at Franchised (The duration is 30 weeks)	24	0	0	24	52	60	40	0	200
Part Time at City Campus (The duration is 30 weeks)	24	0	0	24	52	60	40	0	200
Part Time at Franchised (The duration is 30 weeks)	24	0	0	24	52	60	40	0	200

Module Summative Assessment

Assessment A This assessment is Project A
The weighting of this assessment is 50%
It does not have an examination
The week(s) due are 13

Assessment B This assessment is Project B
The weighting of this assessment is 50%

It does not have an examination
The week(s) due are 27

Programmes on which this module is used:

Programme Code and Title	Stage	Semester	C = Core O = Option
CGE04MC - BSC(HONS) MULTIMEDIA COMPUTING	2	YL	O
CMB04MC - BSC(HONS) MULTIMEDIA COMPUTING	2	YL	C
IZB04MM - BSC (HONS) MULTIMEDIA & DIGITAL ENTERTAINMENT	2	YL	C