

MODULE DESCRIPTOR

MODULE TITLE	ADVANCED LIGHTING PRACTICE		
MODULE CODE	TE3078 (L6)	CREDIT VALUE	20 UK CREDITS / <u>10 ECTS</u>
SCHOOL	SCHOOL OF SCIENCES		

MODULE AIMS

- To extend knowledge to include lighting theories, concepts & practices.
- To develop knowledge of a full range of lighting technologies and light measurement techniques.
- To research and implement lighting techniques to support production in a range of known and novel contexts.
- To extend lighting knowledge and experience in a chosen specialist area – for example drama, multi-camera, theatre, concert, live events, keying etc.
- To raise awareness of the environmental impact of incandescent lighting and explore alternatives.

MODULE CONTENT

Module content will typically include:

- The principles and theories of exposure and reciprocity for single and multi-camera contexts
- The physics of light: the electromagnetic spectrum, lux and lumens, inverse square law, colour and colour temperature
- Vision and perception: the human visual system, adaptive vision, colour constancy,
- Lighting for Drama: Motivated sources, contrast control, utilising a limited dynamic range and lighting for the extended dynamic range of digital cinema cameras.
- Lighting technologies: Luminaire design, reflector, lenses, flags; illumination sources, CRI, Lumens per watt, Incandescent, Discharge, LED
- Lighting for Multi-cam: compromise, cosine rule, cross keying, hard key and fill, vision control
- Lighting Systems: Grid and suspension systems, lighting infrastructure, dimmers, consoles, DMX
- Matt box and filters: use of matt box and flags to limit lens flare and enhance contrast, use of filters to optically control image contrast and colour
- Intelligent Lighting: The use of DMX to control tilt, pan, colour focus, and beam of intelligent lighting technologies

INTENDED LEARNING OUTCOMES

On successful completion of this module a student will be able to:

1. Research, design and deploy lighting solutions to meet a client specification.
2. Recognise and evaluate lighting control and measurement techniques.
3. Synthesise lighting knowledge and theory and apply to production practice.
4. Apply, control & manipulate lighting technologies to support production needs.

TEACHING METHODS

The syllabus will be covered by a mixture of workshops & demonstrations. Students are required to attend all timetabled learning activities for this module. Participation in seminars and workshops is important for both their learning experience and that of their classmates. Notification of illness or exceptional requests for leave of absence must be made to the module leader in the first instance and copied to the course leader.

ASSESSMENT METHODS

This module is assessed through one Lighting production work and one Client production work.